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REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

AND

FINANCIAL REPORT OF THE EXECUTIVE COMMITTEE OF THE BOARD OF REGENTS

1946

SMITHSONIAN INSTITUTION
WASHINGTON, D. C.

REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

AND

FINANCIAL REPORT OF THE EXECUTIVE COMMITTEE OF THE BOARD OF REGENTS

FOR THE

YEAR ENDED JUNE 30

1946

(Publication 3864)

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1946

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price 35 cents

SMITHSONIAN INSTITUTION
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NATIONAL MUSEUM

CONTENTS

	Page
List of officials	v
The establishment	1
The Board of Regents	2
Finances	4
Smithsonian Centennial	4
Position of the Institution after 100 years	9
Proposed new buildings	12
Canal Zone Biological Area	13
Fourteenth Arthur lecture	13
Summary of the year's activities of the branches of the Institution	13
Publications	18
Library	19
Appendix 1. Report on the United States National Museum	21
2. Report on the National Gallery of Art	35
3. Report on the National Collection of Fine Arts	53
4. Report on the Freer Gallery of Art	59
5. Report on the Bureau of American Ethnology	65
6. Report on the International Exchange Service	77
7. Report on the National Zoological Park	85
8. Report on the Astrophysical Observatory	113
9. Report on the library	118
10. Report on publications	123
Report of the executive committee of the Board of Regents	128

THE SMITHSONIAN INSTITUTION

June 30, 1946

Presiding Officer ex officio.—HARRY S. TRUMAN, President of the United States.
Chancellor.—[Vacant].
Members of the Institution:
HARRY S. TRUMAN, President of the United States.
———Vice President of the United States.
FRED M. VINSON, Chief Justice of the United States.
JAMES F. BYRNES, Secretary of State.
JOHN W. SNYDER, Secretary of the Treasury.
ROBERT P. PATTERSON, Secretary of War.
TOM C. CLARK, Attorney General.
FRANK C. WALKER, Postmaster General.
JAMES V. FORRESTAL, Secretary of the Navy.
JULIUS A. KRUG, Secretary of the Interior.
CLINTON P. ANDERSON, Secretary of Agriculture.
HENRY A. WALLACE, Secretary of Commerce.
LEWIS B. SCHWELLENBACH, Secretary of Labor.
Regents of the Institution:
FRED M. VINSON, Chief Justice of the United States.
——— Vice President of the United States.
ALBEN W. BARKLEY, Member of the Senate.
WALLACE H. WHITE, Jr., Member of the Senate.
WALTER F. GEORGE, Member of the Senate.
CLARENCE CANNON, Member of the House of Representatives.
EDWARD E. COX, Member of the House of Representatives.
B. CARROLL REECE, Member of the House of Representatives.
FREDERIC A. DELANO, citizen of Washington, D. C.
HARVEY N. DAVIS, citizen of New Jersey.
ARTHUR H. COMPTON, citizen of Missouri.
VANNEVAR BUSH, citizen of Washington, D. C.
FREDERIC C. WALCOTT, citizen of Connecticut.
Executive Committee.—FREDERIC A. DELANO, VANNEVAR BUSH, CLARENCE CANNON.
Secretary.—ALEXANDER WETMORE.
Assistant Secretary.—JOHN E. GRAF.
Administrative assistant to the Secretary.—HARRY W. DORSEY.
Treasurer.—NICHOLAS W. DORSEY.
Chief, editorial division.—WEBSTER P. TRUE.
Administrative accountant.—THOMAS F. CLARK.
Librarian.—LEILA F. CLARK.
Personnel officer.—B. T. CARWITHEN.
Purchasing officer.—ANTHONY W. WILDING.

UNITED STATES NATIONAL MUSEUM

Director.—ALEXANDER WETMORE.

SCIENTIFIC STAFF

DEPARTMENT OF ANTHROPOLOGY:

Frank M. Setzler, head curator; A. J. Andrews, chief preparator.

Division of Archeology: Neil M. Judd, curator; Waldo R. Wedel, associate curator; J. R. Caldwell, scientific aid; J. Townsend Russell, honorary assistant curator of Old World archeology.

Division of Ethnology: H. W. Krieger, curator; J. C. Ewers, associate curator; R. A. Elder, Jr., assistant curator; Arthur P. Rice, collaborator.

Division of Physical Anthropology: T. Dale Stewart, curator; M. T. Newman, associate curator.

Collaborator in anthropology: George Grant MacCurdy.

DEPARTMENT OF BIOLOGY:

Waldo L. Schmitt, head curator; W. L. Brown, chief taxidermist; Aime M. Awl, illustrator.

Division of Mammals: Remington Kellogg, curator; D. H. Johnson, associate curator *; R. M. Gilmore, associate curator; H. Harold Shamel, scientific aid; A. Brazier Howell, collaborator; Gerrit S. Miller, Jr., associate.

Division of Birds: Herbert Friedmann, curator; H. G. Deignan, associate curator; Alexander Wetmore, custodian of alcoholic and skeleton collections; Arthur C. Bent, collaborator.

Division of Reptiles and Batrachians: Doris M. Cochran, associate curator.

Division of Fishes: Leonard P. Schultz, curator; R. R. Miller, associate curator.

Division of Insects: L. O. Howard, honorary curator; Edward A. Chapin, curator; R. E. Blackwelder, associate curator; W. E. Hoffmann, associate curator; W. L. Jellison, collaborator.

Section of Hymenoptera: S. A. Rohwer, custodian; W. M. Mann, assistant custodian; Robert A. Cushman, assistant custodian.

Section of Myriapoda: O. F. Cook, custodian.

Section of Diptera: Charles T. Greene, assistant custodian.

Section of Coleoptera: L. L. Buchanan, specialist for Casey collection.

Section of Lepidoptera: J. T. Barnes, collaborator.

Section of Forest Tree Beetles: A. D. Hopkins, custodian.

Division of Marine Invertebrates: Waldo L. Schmitt, curator; Mrs. Harriet Richardson Searle, collaborator; Max M. Ellis, collaborator; J. Percy Moore, collaborator; Joseph A. Cushman, collaborator in Foraminifera; Mrs. M. S. Wilson, collaborator in copepod Crustacea.

Division of Mollusks: Harald A. Rehder, associate curator; Joseph P. E. Morrison, assistant curator.

Associate, Division of Mollusks: P. Bartsch.

Section of Helminthological Collections: Benjamin Schwartz, collaborator.

Division of Echinoderms: Austin H. Clark, curator.

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*Now on war duty.

DEPARTMENT OF BIOLOGY—Continued

Division of Plants (National Herbarium): E. P. Killip, curator; Emery C. Leonard, assistant curator; Conrad V. Morton, assistant curator; Egbert H. Walker, assistant curator; John A. Stevenson, custodian of C. G. Lloyd mycological collection.

Associate in Botany: W. R. Maxon.

Section of Grasses: Agnes Chase, custodian.

Section of Cryptogamic Collections: O. F. Cook, assistant curator.

Section of Higher Algae; W. T. Swingle, custodian.

Section of Lower Fungi: D. G. Fairchild, custodian.

Section of Diatoms: Paul S. Conger, associate curator.

Associates in Zoology: Theodore S. Palmer, William B. Marshall, A. G. Böving, W. K. Fisher, C. R. Shoemaker, E. A. Goldman.

Associates in Botany: Henri Pittier, F. A. McClure.

Collaborator in Zoology: Robert Sterling Clark.

Collaborators in Biology: A. K. Fisher, David C. Graham.

DEPARTMENT OF GEOLOGY:

R. S. Bassler, head curator; Jessie G. Beach, aid.

Division of Mineralogy and Petrology: W. F. Foshag, curator; E. P. Henderson, associate curator; B. O. Reberholt, scientific aid; Frank L. Hess, custodian of rare metals and rare earths.

Division of Invertebrate Paleontology and Paleobotany: Gustav A. Cooper, curator; A. R. Loeblich, Jr., associate curator; J. Brookes Knight, research associate in Paleontology.

Section of Invertebrate Paleontology: T. W. Stanton, custodian of Mesozoic collection; J. B. Reeside, Jr., custodian of Mesozoic collection; Paul Bartsch, curator of Cenozoic collection.

Division of Vertebrate Paleontology: C. L. Gazin, curator; Norman H. Boss, chief preparator; A. C. Murray, scientific aid.

Associates in Mineralogy: W. T. Schaller, S. H. Perry.

Associate in Paleontology; T. W. Vaughan.

Associate in Petrology: Whitman Cross.

DEPARTMENT OF ENGINEERING AND INDUSTRIES:

Carl W. Mitman, head curator.

Division of Engineering: Frank A. Taylor, curator.

Section of Transportation and Civil Engineering: Frank A. Taylor, in charge.

Section of Aeronautics: Paul E. Garber,* associate curator, F. C. Reed, acting associate curator.

Section of Mechanical Engineering: Frank A. Taylor, in charge.

Section of Electrical Engineering and Communications: Frank A. Taylor, in charge.

Section of Mining and Metallurgical Engineering: Carl W. Mitman, in charge.

Section of Physical Sciences and Measurement: Frank A. Taylor, in charge.

Section of Tools: Frank A. Taylor, in charge.

*Now on war duty.

DEPARTMENT OF ENGINEERING AND INDUSTRIES—Continued

Division of Crafts and Industries: Frederick L. Lewton, curator; Elizabeth W. Rosson, assistant curator.

Section of Textiles: Frederick L. Lewton, in charge.

Section of Woods and Wood Technology: William N. Watkins, associate curator.

Section of Chemical Industries: Frederick L. Lewton, in charge.

Section of Agricultural Industries: Frederick L. Lewton, in charge.

Division of Medicine and Public Health: Charles Whitebread, associate curator.

Division of Graphic Arts: R. P. Tolman, curator.

Section of Photography: A. J. Olmsted, associate curator.

DIVISION OF HISTORY: T. T. Belote, curator; Charles Carey, associate curator; J. Russell Sirlouis, scientific aid; Catherine L. Manning, assistant curator (philately).

ADMINISTRATIVE STAFF

Chief of correspondence and documents.—H. S. BRYANT.
Assistant chief of correspondence and documents.—L. E. COMMERFORD.
Superintendent of buildings and labor.—L. L. OLIVER.
Assistant superintendent of buildings and labor.—CHARLES C. SINCLAIR.
Editor.—PAUL H. OEHSER.
Accountant and auditor.—T. F. CLARK.
Photographer.—G. I. HIGHTOWER.
Property officer.—A. W. WILDING.
Assistant librarian.—ELISABETH H. GAZIN.

NATIONAL GALLERY OF ART

Trustees:

FRED M. VINSON, Chief Justice of the United States, *Chairman.*
JAMES F. BYRNES, Secretary of State.
JOHN W. SNYDER, Secretary of the Treasury.
ALEXANDER WETMORE, Secretary of the Smithsonian Institution.
PAUL MELLON.
FERDINAND LAMMOT PELIN.
DUNCAN PHILLIPS.
SAMUEL H. KRESS.
CHESTER DALE.

President.—SAMUEL H. KRESS.
Vice President.—FERDINAND LAMMOT BELIN.
Secretary-Treasurer.—HUNTINGTON CAIRNS.
Director.—DAVID E. FINLEY.
Administrator.—H. A. MCBRIDE.
General Counsel.—HUNTINGTON CAIRNS.
Chief Curator.—JOHN WALKER.
Assistant Director.—MACGILL JAMES.

NATIONAL COLLECTION OF FINE ARTS

Acting Director.—RUEL P. TOLMAN.

FREER GALLERY OF ART

Director.—A. G. WENLEY.
Assistant Director.—GRACE DUNHAM GUEST.
Associate in research.—J. A. POPE.
Associate in Near Eastern art.—RICHARD ETTINGHAUSEN.

BUREAU OF AMERICAN ETHNOLOGY

Chief.—MATTHEW W. STIRLING.
Assistant Chief.—FRANK H. H. ROBERTS, Jr.
Senior ethnologists.—H. B. COLLINS, Jr., JOHN P. HARRINGTON, W. N. FENTON.
Senior anthropologists.—H. G. BARNETT, G. R. WILLEY.
Collaborator.—JOHN R. SWANTON.
Editor.—M. HELEN PALMER.
Librarian.—MIRIAM B. KETCHUM.
Illustrator.—EDWIN G. CASSEDY.
INSTITUTE OF SOCIAL ANTHROPOLOGY.—JULIAN H. STEWARD, *Director.*

INTERNATIONAL EXCHANGE SERVICE

Acting Chief.—HARRY W. DORSEY.
Acting Chief Clerk.—D. G. WILLIAMS.

NATIONAL ZOOLOGICAL PARK

Director.—WILLIAM M. MANN.
Assistant Director.—ERNEST P. WALKER.
Head Keeper.—FRANK O. LOWE.

ASTROPHYSICAL OBSERVATORY

Director.—LOYAL B. ALDRICH.

DIVISION OF ASTROPHYSICAL RESEARCH: Loyal B. Aldrich, in charge; William H. Hoover, senior astrophysicist; Charles G. Abbot, research associate.

DIVISION OF RADIATION AND ORGANISMS: Earl S. Johnston, assistant director; Leland B. Clark, engineer (precision instruments); Robert L. Weintraub, associate biochemist; Leonard Price, junior physicist (biophysics).

REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

ALEXANDER WETMORE

FOR THE YEAR ENDED JUNE 30, 1946

To the Board of Regents of the Smithsonian Institution.

GENTLEMEN: I have the honor to submit herewith my report showing the activities and condition of the Smithsonian Institution and the Government bureaus under its administrative charge during the fiscal year ended June 30, 1946. The first 19 pages contain a summary account of the affairs of the Institution. Appendixes 1 to 10 give more detailed reports of the operations of the National Museum, the National Gallery of Art, the National Collection of Fine Arts, the Freer Gallery of Art, the Bureau of American Ethnology, the International Exchanges, the National Zoological Park, the Astrophysical Observatory, the Smithsonian library, and of the publications issued under the direction of the Institution. On page 128 is the financial report of the executive committee of the Board of Regents.

I regret to have to record here the death on April 22, 1946, of the Chancellor of the Institution, Chief Justice Harlan Fiske Stone. Chief Justice Stone was elected Chancellor by the Board of Regents on January 16, 1942, to succeed the former Chief Justice Charles Evans Hughes, and from the day of his appointment took a keen interest in the Institution's affairs. He had planned an active part in the Smithsonian Centennial celebration starting on August 10, 1946, and as Chancellor he took several steps to insure the effective functioning of the Institution in the years to come. His successor should be elected at the next meeting of the board.

THE ESTABLISHMENT

The Smithsonian Institution was created by act of Congress in 1846, according to the terms of the will of James Smithson, of England, who in 1826 bequeathed his property to the United States of America "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men." In receiving the property and accepting the trust, Congress determined that the Federal Government was without authority to

administer the trust directly, and, therefore, constituted an "establishment" whose statutory members are "the President, the Vice President, the Chief Justice, and the heads of the executive departments."

THE BOARD OF REGENTS

During the year the following changes occurred in the personnel of the Board of Regents:

The lamented death of Chief Justice Harlan Fiske Stone, on April 22, 1946, created a vacancy in the office of Chancellor of the Board of Regents.

November 23, 1945. A vacancy in the class of citizen regents, caused by the death of Dr. Roland S. Morris, of Pennsylvania, has not yet been filled.

May 2, 1946. Dr. Vannevar Bush, citizen regent, was reappointed by joint resolution of Congress to succeed himself for a statutory term of 6 years.

June 24, 1946. The Honorable Fred M. Vinson, on his appointment as Chief Justice of the United States, became ex officio a member of the Board of Regents.

The roll of regents at the close of the fiscal year, June 30, 1946, was as follows:

Fred M. Vinson, Chief Justice of the United States; members from the Senate—Alben W. Barkley, Wallace H. White, Jr., Walter F. George; members from the House of Representatives—Clarence Cannon, Edward E. Cox, B. Carroll Reece; citizen members, Frederic A. Delano, Washington, D. C., Harvey N. Davis, New Jersey, Arthur H. Compton, Missouri, Vannevar Bush, Washington, D. C., and Frederic C. Walcott, Connecticut.

Proceedings.—The annual meeting of the Board of Regents was held on January 18, 1946, with the following members present: Chief Justice Harlan F. Stone, Chancellor; Senator Wallace H. White, Jr.; Representatives Edward E. Cox and B. Carroll Reece; citizen regents, Dr. Harvey N. Davis, Dr. Vannevar Bush, Frederic A. Delano, and Frederic C. Walcott; the Secretary, Dr. Alexander Wetmore, and the Assistant Secretary, John E. Graf. Dr. W. J. Robbins, chairman of the Committee on Future Policies, attended the opening of the meeting by invitation and later withdrew.

In accordance with the resolution passed by the Board at the last annual meeting, the Chancellor appointed the following to serve on the Committee on Future Policies of the Smithsonian Institution: Dr. William J. Robbins (chairman), New York Botanical Garden; Dr. L. P. Eisenhart, American Philosophical Society; Dr. George Gaylord Simpson, American Museum of Natural History; Dr. Zay

Jeffries, General Electric Co.; Dr. Walter S. Adams, Mount Wilson Observatory; Dr. F. R. Reichelderfer, United States Weather Bureau; and Dr. A. V. Kidder, Carnegie Institution of Washington. Dr. Robbins, chairman, stated that this committee would do its best to present an acceptable program for the future of the Institution, and announced that the first meeting would be held on January 30, 1946, in the Smithsonian Building.

The Secretary presented his annual report covering the activities of the parent institution and of its several branches, including the financial report of the executive committee, for the fiscal year ended June 30, 1945, which was accepted by the Board. The usual resolution authorizing the expenditure by the Secretary of the income of the Institution for the fiscal year ending June 30, 1947, was adopted by the Board.

The annual report of the Smithsonian Art Commission was presented by the Secretary and accepted by the Board. The Commission, at its meeting on December 4, 1945, accepted several works of art. A resolution was adopted to reelect the following members for 4-year terms: John Nicholas Brown, Mahonri M. Young, George Hewitt Myers, and Robert Woods Bliss. Vacancies on the Commission were caused by the death of Herbert Adams and the resignation of Edward W. Redfield. The names of John Taylor Arms and Eugene E. Speicher, recommended by the Commission, were approved by the Board to fill the above vacancies. Paul Manship was reelected chairman, and Dr. Wetmore was reelected Secretary.

Tentative plans were presented by the Secretary for the Centennial celebration to be held during August 1946.

The matter of the Secretary's salary and pension was referred to the executive committee with power to act.

The Secretary reported that Mrs. Charleyne Whitney Gellatly, widow of John Gellatly, had brought proceedings before the Court of Claims through a bill in Congress, demanding restitution or payment for certain objects in the Gellatly art collection. The Smithsonian Institution is defended in this proceeding by the Department of Justice, through Grover Sherrod, and has, in addition, the valuable assistance of Huntington Cairns, General Counsel for the National Gallery of Art. Hearing on the case was set for February 12, 1946.

By the terms of the will of Dr. Aleš Hrdlička, deceased member of the staff, a sum of money was bequeathed to the Smithsonian Institution for the benefit of educational establishments in Dr. Hrdlička's native town of Humpolec, Bohemia. Acceptance of this trust fund was approved by the Board. A further bequest in the Hrdlička will,

to provide for the reprinting of his papers on physical anthropology, was declined as being impracticable because of the inadequacy of the funds provided.

On December 20, 1938, Miss Annie-May Hegeman advised the Institution that, as a memorial to her father, Henry Kirke Porter, she had tendered to the Library of Congress Trust Fund Board conveyance of the property owned by her at the corner of Sixteenth and I Streets NW., in Washington, as a gift, under agreement that when the property was sold, the Library of Congress Trust Fund Board should pay one-half of the net proceeds of such sale to the Smithsonian Institution, to be invested, and the income thereof to be applied to the general purposes of the Institution, the gift to be recorded as "The Henry Kirke Porter Memorial Fund." The Secretary reported that the property had just been sold at a price of $600,000; under the terms of the gift the Institution will receive one-half of the net proceeds.

At the last meeting the Board authorized the executive committee to have a survey made of the business methods and practices now in effect in the Institution to determine whether changes or improvements were required. The committee directed the Secretary on their behalf to enter into contract with the firm of Peat, Marwick, Mitchell & Co., who specialize in such work. This firm has rendered a comprehensive report covering organization and personnel, business methods, and accounting procedures, from which the Secretary gave the following quotation:

"Our conclusions in summary are that the administrative organization is set up along simple and effective lines, the personnel is of high caliber, conscientious and efficient for the particular requirements of the Institution, the business methods on the whole are very good, and the accounting system is essentially sound in principle. We have suggestions to offer for some changes toward improvements which we believe to be possible. These are given in the course of our comments in more detail upon the various topics falling within this area."

In a special statement, Dr. Wetmore outlined to the Board recent activities carried on by all branches of the Institution.

FINANCES

A statement on finances will be found in the report of the executive committee of the Board of Regents, page 128.

SMITHSONIAN CENTENNIAL

The year 1946 marks the one-hundredth year since the founding of the Institution. Strictly speaking, this report covers only the fiscal year ended June 30, 1946, but as the actual anniversary of the estab-

lishment of the Institution falls on August 10, only a little over a month after the beginning of the new fiscal year, it seems advisable in this report to anticipate to the extent of describing the Centennial observances.

Smithsonian commemorative stamp.—Among the outstanding honors that came to the Institution on its one-hundredth anniversary was the issuance by the Post Office Department of a special commemorative 3-cent postage stamp depicting the Smithsonian Building and containing the words "For the increase and diffusion of knowledge among men." The design was suggested by the Chancellor of the Institution, the late Chief Justice Harlan F. Stone. On the morning of August 10, 1946, in an impressive ceremony held in the auditorium of the National Museum, the first sheet of the Smithsonian stamps was presented to the Institution by Assistant Postmaster General Joseph J. Lawler on behalf of Postmaster General Robert E. Hannegan. The ceremony was broadcast by the National Broadcasting Co. through Station WRC, and music was furnished by the Navy Band Orchestra. Mr. Lawler concluded his remarks with these words:

"Thus it will be shown that the philanthropy of one man (James Smithson), coupled with the interest of another (Chief Justice Harlan F. Stone), made possible this commemorative postage stamp and brought together today this distinguished gathering of men and women to pay honor to an Institution whose record of achievement in the 100 years of its existence is well known throughout the civilized world. My one regret is that the late Chief Justice Stone, who played so important a part in making today's celebration a reality, is not present to enjoy the fruits of his labors for such a just and meritorious cause. Dr. Wetmore, it gives me great pleasure to present to you the first sheet of this Smithsonian Institution commemorative postage stamp."

In accepting the stamps on behalf of the Institution, I reviewed briefly the growth and expansion of the Smithsonian during the first 100 years of its existence, and concluded as follows:

"Such, in brief outline, is the Institution that today receives the signal honor of a commemorative United States postage stamp. For 100 years it has fostered diligently James Smithson's clear-sighted vision of the value to mankind of an institution devoted to the increase and diffusion of knowledge among men. At this milestone on its journey into the unknown future, the Institution dedicates itself anew to the promotion of Smithson's ideals.

"Mr. Lawler, on behalf of the Board of Regents of the Smithsonian Institution and for myself, I thank you for the recognition of the Institution's work expressed through this fine commemorative stamp,

and for this first sheet, which will have a place of honor in our philatelic collections."

Centennial publications.—To provide a permanent record of the Institution's hundredth anniversary, as well as to call public attention to the event, there was issued on August 10, 1946, the anniversary date, a book entitled "The First Hundred Years of the Smithsonian Institution," by Webster P. True, chief of the Institution's editorial division. In it are reviewed briefly the origin and development of the Institution itself and of the several bureaus that have grown up around the parent organization, its extensive work in the fields of research, exploration, and publication, and its function in times of war. Special attention was given to typographic design and to the illustrations, with the result that many commendatory letters have come from recipients of the book.

I also authorized the preparation of a complete list, with classified index, of all publications of the National Museum from 1875, the year in which the Museum began publication of a separate series, to 1946, the list to appear as a feature of the Centennial observance. The project was turned over to the editorial division, and the difficult task of preparing the classified index was undertaken by Miss Gladys O. Visel, of that division. It is hoped to issue the list before the close of the calendar year 1946. Copies will be placed in libraries and universities throughout the world, and the availability of such an index will greatly increase the usefulness of the Museum's publications to scientists and students.

Smithsonian Institution Centennial issue of "Science."—The journal "Science," official organ of the American Association for the Advancement of Science, very generously devoted the entire issue of August 9, 1946, to the Smithsonian Centennial. The editor of Science, Dr. Willard L. Valentine, named as guest editor for the issue Paul H. Oehser, assistant chief of the Smithsonian's editorial division. After an introductory statement by the Secretary outlining the developments and activities of the Institution, special articles by Smithsonian staff members review the various phases of its work, including astrophysics, anthropology, geology, biology, and engineering, as well as its publications, the International Exchange Service, its library, and the Smithsonian Deposit in the Library of Congress.

Centennial convocation.—On October 23, 1946, a Smithsonian convocation was held to mark in a more formal manner the Institution's one-hundredth anniversary. The event was timed to coincide with the fall meetings of the National Academy of Sciences and of the American Philosophical Society, the members of which, together with some 40 distinguished foreign scientists who attended their meetings, were the guests of the Institution for an evening affair in the Natural

History Building of the National Museum. There were felicitations by Dr. L. P. Eisenhart for the American Philosophical Society, and by Dr. F. B. Jewett for the National Academy of Sciences, with a response on behalf of the Institution by the Secretary, and an illustrated lecture by Dr. M. W. Stirling, Chief of the Bureau of American Ethnology, on the La Venta culture of southern Mexico, reviewing the scientific results of his 8 years of archeological work in that region in cooperation with the National Geographic Society. The addresses were followed by a reception to the National Academy and American Philosophical Society members and some 1,000 other scientists, educators, and Government officials.

Public notice of the Centennial.—On August 10, 1946, the White House issued as a news release a statement by President Harry S. Truman, who is ex officio Presiding Officer of the Institution. The statement is here quoted in full:

"On August 10, 1846, James K. Polk, eleventh President of the United States, put his signature on the act of Congress establishing the Smithsonian Institution. Today, August 10, 1946, we celebrate the one-hundredth anniversary of this venerable organization that is an American tradition.

"As presiding officer of the Institution, it is fitting that I, as President of the United States, should publicly take cognizance of this occasion.

"When James Smithson, an English chemist and mineralogist, died in 1829, it was found that he had left his fortune to the United States to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men. When Congress was notified of the unusual bequest, there arose a storm of debate, at times highly acrimonious, as to what to do with the gift. But finally, after some 8 years of discussion, sane counsel prevailed, the bequest was accepted, and the Smithsonian Institution was formally established under a broad definition of its proper functions.

"The act of foundation provides that the Smithsonian establishment shall consist of the President, the Vice President, and the Chief Justice of the United States, together with the heads of the Executive Departments. The managing body of the Institution is the Board of Regents, composed of the Vice President of the United States and the Chief Justice of the United States, ex officio, three Senators, three Representatives, and six eminent citizens. The executive officer directly in charge of the Institution's activities is the Secretary, chosen by the Board. There have been six eminent Secretaries: Joseph Henry, physicist; Spencer Fullerton Baird, biologist; Samuel Pierpont Lang-

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ley, astronomer and pioneer in aeronautics; Charles Doolittle Walcott, geologist and paleontologist; Charles Greeley Abbot, astrophysicist; and the present Secretary, Alexander Wetmore, biologist.

"It is hardly necessary to state that this is the age of science—newspaper headlines remind us of this every day. Atomic power, jet propulsion, television, transmutation of elements, metals from sea water, penicillin—all these and many more present-day marvels trace back invariably to basic scientific investigation. In view of the more spectacular nature of recent discoveries in physics, chemistry, and medicine, and their adaptability to prompt economic application, we are likely to lose sight of the equal importance to mankind of research in such other sciences as anthropology, biology, and geology—sciences with which the Smithsonian Institution has been particularly concerned. Here, too, the steady progress made during the past 100 years has likewise contributed greatly to man's welfare, through a better knowledge and hence a fuller control of his environment, an understanding without which our present high hopes and plans for a united and peaceful world would have an even more difficult road to travel.

"For a full century the Smithsonian Institution has been a world center for the promotion of science, art, and other cultural activities. Congratulations are in order upon the Smithsonian's record in the advancement of science and culture during a most important century in the history of mankind, but this should be not merely a time for counting laurels. Rather it should be a time for further consideration of the ideals of the founder, James Smithson, and a renewal of the Institution's zeal in the increase of the sum total of man's knowledge. The Smithsonian should continue to strive toward the end that man should not only know better his earthly abode, but should acquire the means of knowing himself better. Such studies are of vital significance in our present efforts to build a better world order, and to break the cycle of recurring wars of ever-increasing destructiveness.

"On this one-hundredth anniversary of the founding of the Smithsonian Institution, may we accord all honor to the founder, James Smithson, for his lofty and far-seeing ideals. May the next 100 years bring even more glory to the name of the Institution and to that of its founder."

In addition to carrying the White House release, many leading newspapers and magazines printed special feature articles on the Smithsonian Centennial, and a number of radio commentators called attention to the event on their August 10 news programs.

Special Centennial exhibit.—With the aim of bringing the Institution's Centennial to the attention of the thousands of visitors who

throng the Museum buildings every day, a special exhibit was opened on August 10 in the foyer of the Natural History Building. In separate alcoves were presented graphically by means of maps, photographs, specimens, and publications the various phases of Smithsonian work during the past 100 years. The alcoves covered origin and history, research, exploration, publications, art, and custodianship of the national collections.

POSITION OF THE INSTITUTION AFTER 100 YEARS

Before surveying the Institution's present position, I will introduce the subject by quoting a part of my general statement printed in the August 9 issue of Science, which was devoted to the Smithsonian Centennial.

"On August 10, 1846, the Smithsonian Institution came into being when James K. Polk, President of the United States, affixed his signature to the act of its foundation. For 100 years the Smithsonian has carried forward Smithson's ideal through scientific research in many fields, through world-wide exploration, through publications embodying the results of original investigation, and through other accepted methods of increasing and diffusing information.

"At the middle of the last century, Washington, the capital of our Nation, was a small city of some 50,000 inhabitants. Great expanses of unoccupied land lay beyond the Appalachian Mountains, and the detailed exploration of the vast area beyond the Missouri River was under way. The American Philosophical Society met in Philadelphia, certain other societies with scientific interests had been organized, and small natural history museums existed in a few centers, such as Harvard College and Charleston. Science in any of its branches was at best an avocation in this New World, except to a few individuals, and those Americans who had opportunity or leisure for scientific studies looked almost wholly for guidance to the Old World, whence they or their immediate ancestors had come. Into such a setting came the new Smithsonian Institution, to support and encourage scientific and cultural knowledge and to give to American science a powerful and far-reaching stimulus.

"Joseph Henry, first Secretary of the Smithsonian, set up a wise and far-seeing plan of organization, effective in the sound basic principles on which it rested, embodying close cooperation with other agencies and individuals, and looking to the cumulative advancement of knowledge. After Henry came Spencer Fullerton Baird, biologist, as second Secretary; then Samuel Pierpont Langley, astronomer and pioneer in aeronautical research; Charles Doolittle Walcott, geologist and paleontologist; and Charles Greeley Abbot, astrophysicist—all

distinguished men of science. From its early activities, bureaus grew up around the parent Institution—first the United States National Museum, then the International Exchange Service, the Bureau of American Ethnology, the National Zoological Park, and the Astrophysical Observatory. As the public value of these services became evident, their support was assumed in whole or in part by the Government, although they remained as bureaus of the Smithsonian Institution.

"In addition to its scientific activities, the Smithsonian is charged in its act of foundation with responsibility for national art treasures. The art feature has culminated recently in the National Gallery of Art, given to the Nation by Andrew W. Mellon and augmented richly by other philanthropists. The Gallery is established as a bureau of the Smithsonian Institution, but is directed by a separate board of trustees. The earlier art interests of the Institution are included in the National Collection of Fine Arts and the Freer Gallery of Art. The latter, presented and endowed by Charles L. Freer, is devoted chiefly to the Oriental field, and through its highly valuable archeological materials will figure more and more importantly in strictly scientific studies.

"From one building, a small staff, and a single publication, the Institution has grown in a century until it now occupies five buildings on the Mall and numerous structures at the National Zoological Park, while it issues 14 series of publications, each devoted to a particular sphere."

As the Institution goes into the second century of its existence, its position is strong in some respects and weak in others. Its work in the increase and diffusion of knowledge over the past 100 years has established for it a national and international reputation among scholarly organizations, providing unquestioned entree into any field of cultural endeavor anywhere in the world. On the staffs of its scientific bureaus—namely, the United States National Museum, the Bureau of American Ethnology, and the Astrophysical Observatory—are highly trained specialists in several branches of science, many of them ranking among the leaders in their respective fields. In the National Museum, vast study collections in biology, geology, and anthropology offer unlimited opportunity for fertile investigations in those fields. The three bureaus of the Institution devoted to art—the National Gallery of Art, the National Collection of Fine Arts, and the Freer Gallery of Art—all comprise splendid art collections in their respective fields, together forming a growing aggregation that makes Washington one of the world's art centers.

On the other side of the picture, weaknesses exist in several directions. The collections and essential staff of the Institution and its

various bureaus have long since outgrown the present housing facilities and physical equipment. Many of the Institution's activities, both scientific and administrative, are undermanned, leading to some degree of failure to enter upon desirable new enterprises. Financial resources, public and private, should be increased to promote the Institution's opportunities for advancement of knowledge through research and publication. The public exhibits in the National Museum, viewed by more than 2,000,000 visitors each year, require modernization, begun in 1940 but postponed because of the war. Resources available for printing and binding have not been sufficient to enable the Institution to keep pace with the manuscript output of the scientific staff or to keep abreast of the necessary binding in the Smithsonian library of 1,000,000 volumes. This condition has led to the creation of a large backlog of unpublished scientific manuscripts, and of unbound periodicals in the library.

The first step toward improvement is the recognition of weaknesses. Having outlined important ones, I may take some satisfaction in stating that plans are now shaping up to remedy them. A building program to relieve the present overcrowding is already outlined, and the outlook is bright that before many years more building space will be available to assure proper operation and normal expansion. Definite efforts have already been started to obtain funds to increase the personnel where it is most needed, to make a beginning on modernization of exhibits, and to keep more nearly abreast of the manuscripts produced by the scientific staff, so essential to the Institution's responsibilities in the diffusion of knowledge.

When the Smithsonian Institution was founded 100 years ago, it stood almost alone in America as an organization devoted solely to the promotion of science and of learning in general. During the first century of its existence, other large foundations have come into being—some of them with far larger resources—until today there are in America scores of research institutions and laboratories, some of them independent foundations, some attached to universities, and others forming essential parts of large industrial concerns. While many of these are restricted to specific lines of scientific work, the Smithsonian Institution has no limitation in scope of activity as long as its endeavors operate to increase and diffuse knowledge. It can therefore enter into any new fields of investigation that are feasible with the funds and personnel at its command, but in order to make its work most effective in the increase of knowledge, the Institution must now plan carefully to avoid duplicating the efforts of other research organizations.

At the close of its first century of operation and standing at the threshold of the second century, the Institution's first concern will be

to continue to execute faithfully the trust reposed in the United States of America by James Smithson, its founder, more than 100 years ago.

PROPOSED NEW BUILDINGS

On October 3, 1945, H. R. 4276, the Public Buildings Act of 1945, was introduced in Congress and referred to the Committee on Public Buildings and Grounds. The part that concerns the Institution reads as follows:

"Sec. 202. The Federal Works Administrator is hereby authorized, under the provisions of the Public Buildings Act of May 25, 1926, as amended (40 U. S. C. 341–347), to acquire land where necessary and to construct for the Smithsonian Institution the following buildings and facilities:

(*a*) A building on a suitable site in the Mall for a historical museum to include space for the exhibition of the historical collection of the Nation, including naval and military collections, memorabilia of noted Americans, philately, and numismatics, under a total limit of cost of $6,600,000.

(*b*) A building for the engineering and industrial collections of the Nation, including aviation, under a total limit of cost of $9,150,000.

(*c*) Additional facilities at the National Zoological Park, including an aquarium, a lion house, an antelope house, a monkey house and monkey island, and barless pits and paddocks, under a total limit of cost of $2,645,000."

If this bill becomes a law and the funds authorized are appropriated, the very extensive and valuable national collections in the fields of history and engineering and industries could be properly housed and exhibited to the public. The exhibits in these fields, which are among the most interesting of all to visitors, are at present crowded together in one building erected 67 years ago and now entirely inadequate for the purpose.

To anticipate slightly the next fiscal year, the President approved on August 12, 1946, an act to establish a national air museum as a bureau of the Institution and to authorize the appropriation of certain funds for the purpose. When funds are made available to carry out the purposes of this act, the present intolerably overcrowded condition of the national aeronautical collections will be alleviated. The vitally interesting historical aircraft, engines, and other aeronautical material now in the collections are housed in a steel structure built during World War I and later turned over to the Institution to accommodate temporarily the growing aircraft collection. This building is now full to overflowing, leaving no space to exhibit material illustrating the tremendous recent advances in aeronautics.

It is the earnest hope of the Institution that these proposed buildings will become actualities in the near future to the end that the priceless national collections may be properly safeguarded and exhibited to the ever-increasing number of visitors from all parts of the country.

CANAL ZONE BIOLOGICAL AREA

Under the President's Reorganization Plan No. 3, the biological station on Barro Colorado Island, known as the Canal Zone Biological Area, was placed under the administration of the Smithsonian Institution on July 16, 1946. This area in Gatun Lake was set aside by a 1940 act of Congress in order to preserve in its original state the fauna, flora, and other natural features for study by scientists, particularly those from North, Central, and South America.

The Barro Colorado station has been maintained as a Federal agency since 1940 by contractual arrangements with other Federal agencies and by fees subscribed by American scientific institutions. The income from this method of support has not, however, been sufficient to maintain the laboratories and other facilities in good condition, and the Institution's first concern upon taking over this new responsibility will be to obtain funds for rehabilitation of the physical plant and the proper equipping of the laboratories and other buildings.

The reorganization plan was not actually approved until shortly after the close of the fiscal year, so that further discussion of the project will be reserved for the next report.

FOURTEENTH ARTHUR LECTURE

Under the terms of the will of the late James Arthur, of New York, the Smithsonian Institution received in 1931 a fund, part of the income from which should be used for an annual lecture on some aspect of the science of the sun.

The fourteenth Arthur lecture, entitled "The Sun and the Harvest of the Sea," was given by Dr. Waldo L. Schmitt, head curator of biology of the National Museum, on March 5, 1946. This lecture, with illustrations, will be published in the Annual Report of the Smithsonian Institution for 1946.

SUMMARY OF THE YEAR'S ACTIVITIES OF THE BRANCHES OF THE INSTITUTION

National Museum.—In this first year after the end of the war there were marked increases in the number of specimens accessioned and in the number of visitors, and field expeditions began again to go out from the Museum after having been held in abeyance during the war years. Outstanding among the year's accessions were the following: In anthropology, 6,765 artifacts from protohistoric Indian sites in Kansas

and adjoining States, 226 specimens from Ezion-geber in Trans-Jordan, and documented field collections from Melanesian villages of northeastern New Guinea; in biology, large numbers of specimens from the Pacific area, most of them resulting from activities of military and naval organizations or personnel, including birds and mammals from the South Pacific and the Orient, fishes from the Marianas, 10,000 mosquitoes from various Pacific islands and Burma, and plants from the Admiralty, Aleutian, Caroline, and Solomon Islands, and other Pacific areas; in geology, specimens of four minerals not hitherto represented, sal-ammoniac crystals and other sublimates from the new Mexican volcano, Parícutin, and large collections of fossil invertebrates from various localities in the United States; in engineering and industries, 3 electromechanical tabulating machines and several high-speed precision gages, 2 early commercial sewing machines of 1858 and 1874, and a specially designed exhibit illustrating the contributions of the mineral kingdom to materia medica; in history, a Japanese parachute found in New Guinea, 37 models of United States, French, and British warships of World War II, and 4 dresses dating from 1814, 1855, 1861, and 1894 for the collection of American period costumes. Field work included insect studies in Colombia, a survey of the fish and game resources of Guatemala, a survey of the fauna of Bikini Atoll in connection with the atom-bomb tests, studies of the bird life of Panamá and of Colombia, and fossil collecting in various parts of the United States. Visitors for the year totaled 2,115,593, an increase of nearly 400,000 over the previous year. The Museum published two Annual Reports, six Bulletins, and five Proceedings papers.

National Gallery of Art.—Six new gallery rooms were completed and opened to the public on February 2, 1946, and a contract was entered into for the installation of additional air-conditioning equipment. The Gallery continued to receive many valuable gifts of paintings, sculpture, decorative prints and drawings, and one painting "Siegfried and the Rhine Maidens," by Albert P. Ryder, was purchased with Gallery funds. Traveling exhibitions of water colors and drawings from the collection of the Index of American Design and prints from the Rosenwald Collection were shown at a number of art galleries and museums. The Gallery accepted for safekeeping 202 paintings from German museums; these have been placed in storage until conditions in Germany insuring their proper care have been reestablished. The staff prepared a number of books and catalogs on the Gallery collections, and contributed articles to outside art journals. The second edition of "Masterpieces of Painting from the National Gallery of Art" was placed on sale, and a third edition was being prepared. A new edition of the General Information booklet, for

free distribution to visitors, was issued, and the sale of postcards, color reproductions, and moderately priced catalogs was continued. The Sunday evening concerts in the East Garden Court, and the daily 10-minute talks on "The Picture of the Week," were continued with undiminished popularity. The total number of visitors to the Gallery was 1,947,668.

National Collection of Fine Arts.—The twenty-third meeting of the Smithsonian Art Commission was held on December 4, 1945, when four art works submitted during the year were accepted for the National Collection. Resolutions were adopted on the death of Herbert Adams, a member of the Commission, and John Taylor Arms was recommended to succeed him. To succeed Edward W. Redfield, who resigned during the year, the Commission recommended Eugene E. Speicher. Two miniatures were acquired through the Catherine Walden Myer fund, and two pieces of pottery through the Reverend Alfred Duane Pell fund. Eleven special exhibitions were held during the year, as follows: The Honorable William D. Pawley collection of 27 portraits of "Flying Tigers" by Raymond P. R. Neilson, N. A.; 28 sculptures by Genaro Amador Lira, of Nicaragua; 20 portraits of members of the Lafayette Escadrille, by John Elliott; the Eighth Metropolitan State Art Contest, comprising 412 paintings, sculpture, prints, and metalcraft; the forty-fourth annual exhibition of miniatures by the Pennsylvania Society of Miniature Painters, consisting of 100 miniatures; 53 portraits by Alfred Jonniaux; A Century of the Greeting Card, courtesy of Brownie's Blockprints, Inc.; 53 oil and water-color paintings by Charles P. Gruppe; 54 paintings of Siam by students of the School of Arts and Crafts, Bangkok; Biennial Exhibition of the League of American Pen Women, including 582 art objects; and the Scholastic Calendar Art Competition, including 150 paintings.

Freer Gallery of Art.—Additions to the collections included Chinese bronze, painting, and pottery, Bactrian and Chinese metalwork, a Korean gold ornament, and a Chinese manuscript. The work of the staff was devoted to the study of new accessions and of objects submitted for purchase; general research work within the collections of Chinese, Japanese, Arabic, Persian, and Indian materials; the preparation of material for publication and the revision of earlier work; docent service, and public lectures. Reports were made upon 1,612 objects and 408 reproductions of objects submitted for examination, and 132 Oriental language inscriptions were translated. The total number of visitors to the Gallery for the year was 97,822, and 1,625 persons visited the main office for various purposes. Members of the staff made several trips out of Washington on official business connected with the work of the Gallery. Miss Grace Dunham Guest,

Assistant Director, retired June 30, after 26 years of service with the Gallery, and was given the honorary title of Freer Gallery of Art research associate. John A. Pope, associate in research, and William R. B. Acker, associate in languages, returned to the Gallery from absence on war duty.

Bureau of American Ethnology.—The Smithsonian Institution-National Geographic Society archeological project in southern México was carried forward by Dr. M. W. Stirling, Chief of the Bureau, assisted by Dr. Philip Drucker of the Bureau staff. Twenty-four stone monuments were located, including altars, statues, and monolithic heads of Olmec and La Venta type. Dr. Frank H. H. Roberts, Jr., Assistant Chief of the Bureau, was designated director of the archeological surveys and excavations of Indian sites to be flooded by proposed dam construction in various river basins, to be conducted under Smithsonian administration in cooperation with the National Park Service, the Corps of Engineers, and the Bureau of Reclamation. A large part of his time during the year was devoted to this extensive project. Dr. John P. Harrington continued his study of Indian languages, producing a Kiowa grammar of 405 manuscript pages. Later in the year he pursued linguistic studies in New Mexico and California. Dr. Henry B. Collins, Jr., directed the closing operations of the ethnogeographic board for 6 months after its dissolution on December 31, 1945, and then resumed his research on Eskimo archeology. He attended several meetings of the board of governors of the Arctic Institute of North America in Montreal. Dr. William N. Fenton continued his study of the place names of the Cornplanter Senecas and collected material relative to the Condolence Council for installing chiefs in the Iroquois League. In connection with his Iroquois studies, Dr. Fenton attended the First Conference on Iroquois Research at Allegany State Park, N. Y., October 26–28. Dr. Gordon Willey completed a 50,000-word manuscript on "Excavations in Southeast Florida" and a 25,000-word article on South American ceramics for inclusion in the Handbook of South American Indians. He also assisted Dr. Roberts in preparing preliminary plans for the Federal Valley Authority archeological program. At the end of the fiscal year he was engaged in archeological work in the Virú Valley in northern Perú. The Institute of Social Anthropology, an autonomous unit of the Bureau under the directorship of Dr. Julian H. Steward, continued its program of cultural and scientific cooperation with the other American republics by a transfer of funds from the Department of State. University courses and field researches were conducted in México, Perú, and Brasil in cooperation with cultural organizations of those countries, and several publications resulting from the field

work were in press. Miss Frances Densmore, a collaborator of the Bureau, submitted three papers on Indian music and a complete bibliography covering 50 years of study of American Indian music. The Bureau issued one Annual Report, one Bulletin, two volumes of the Handbook of South American Indians, and one publication of the Institute of Social Anthropology.

International Exchanges.—The International Exchange Service is the official agency of the United States for the exchange of governmental and scientific publications between this country and all other countries. During the war shipments to many countries were necessarily suspended; but during the past year most of these shipments have been resumed, and accumulated material being held at the Institution was reduced from 3,512 boxes to 1,109. The number of packages passing through the exchanges totaled 540,502, which included 3,117 boxes shipped from the Institution, an increase of 2,134 over the previous year; the total weight of the material handled was 472,299 pounds. The average weight of the individual packages was nearly double that of the year before, indicating that institutions are sending out some of the material held up by the war.

National Zoological Park.—During the war years, because of shortage of personnel, maintenance of buildings and grounds was necessarily neglected to some extent. Although the return to prewar maintenance standards has been hampered by the difficulty of recruiting trained personnel, nevertheless the past year witnessed a perceptible improvement in general conditions throughout the establishment. The Park urgently needs new buildings to replace the remaining antiquated structures still being used to house animals, and preliminary planning has been discussed with the Public Works Administration for construction of these buildings when conditions justify such work. The number of visitors for the year showed a marked increase over the previous year, owing to the removal of the wartime ban on pleasure driving and to the general increase in civilian travel. The total number of visitors was 2,372,337, an increase over the fiscal year 1945 of 265,253. Although the number of rare or unusual animals has naturally decreased somewhat under wartime conditions, the reduction is largely offset by an increase in number of the commoner kinds. Rarities gradually began to come in again during the year, and it is anticipated that normal growth in this respect will now be resumed. At the close of the year the population of the Zoo numbered 2,553 individual creatures, representing 701 different species.

Astrophysical Observatory.—Final tabulation was made of the solar-constant values for the calendar year 1945. A new vacuum bolometer, designed at the Observatory, will eliminate gradual loss

of sensitivity. Under the terms of a contract with the Office of the Quartermaster General, the Observatory is making a detailed study of sun and sky radiation at Camp Lee, Va., as part of the program to determine causes of tent-fabric deterioration. Eight copies of a special instrument based on the sensitive, quick-acting thermoelement developed at the Observatory have been installed and put into operation at Camp Lee. A large volume of information is accumulating concerning the amount and kind of radiation, for each hour of each day, that falls on the tents being tested. Observations continued at the three field stations until February 1946, when the Tyrone, N. Mex., station was closed. The equipment will be installed temporarily at a sea-level location in Florida to study transmission of radiation through water vapor. Dr. Abbot published two papers dealing with his studies of the correlation between solar activity and weather changes. In the Division of Radiation and Organisms, experiments have been carried on in connection with improving the accuracy of apparatus used in determining the amount of carbon dioxide absorbed by green plants in the process of photosynthesis. The study of plant growth under controlled artificial conditions of mineral nutrition, illumination, temperature, and humidity has been continued. Further improvement of technique is being studied.

PUBLICATIONS

The Institution's several series of publications constitute its chief means of carrying on the "diffusion of knowledge," which joins with the "increase of knowledge" to form the purpose of the Institution as stipulated by the founder, James Smithson. The Smithsonian publication program started in 1848 with one series, the Smithsonian Contributions to Knowledge, and as the Institution's research work expanded over the years, other series were established to contain the several phases of its investigations until today the Smithsonian imprint appears on 14 distinct series. At the end of its first full century of existence, the Institution has issued some 7,500 individual publications, of which 12,000,000 copies have been distributed. As the great majority of these works are the result of original researches, a large volume of basic new knowledge has been made available to the world through Smithsonian publications. It has been stated on numerous occasions that few textbooks or encyclopedias exist that have not drawn to some extent on publications of the Smithsonian Institution.

Among the outstanding papers issued during the year may be mentioned "A Bibliography and Short Biographical Sketch of William Healey Dall," by Paul Bartsch, Harald Rehder, and Beulah E. Shields; "Sunspot Changes and Weather Changes," by H. H. Clayton; "An

Annotated Checklist and Key to the Snakes of Mexico," by Hobart M. Smith and Edward M. Taylor; "The Birds of Northern Thailand," by H. G. Deignan; "The Indians of the Southeastern United States," by John R. Swanton; and volumes 1 and 2 of the Handbook of South American Indians, edited by Julian H. Steward.

A total of 64 publications was issued during the year, and 129,750 copies of publications in all series were distributed.

LIBRARY

With the ending of the war early in the fiscal year, and the gradual improvement in shipping conditions, the transmission of material from European countries was resumed, and receipts increased in frequency and number, the total number of accessions recorded being 37,143. Also, the library was able to send abroad several thousand pieces from its stock of duplicates to assist in the rehabilitation of destroyed libraries. Among the 1,303 books purchased were a number of out-of-print works which are noteworthy not so much for their rarity as because they fill some special gaps in the collections. Outstanding among the gifts of books and pamphlets was the late Charles W. Gilmore's private collection of 600 volumes and hundreds of reprints and separates on vertebrate paleontology which was presented to the library by Mrs. Gilmore. The total recorded volumes in the library at the end of the fiscal year was 928,353; of this number 5,279 were accessioned this year. Two hundred and sixty-two new exchanges were arranged; 6,259 specially requested publications were received; 6,124 volumes and pamphlets were cataloged, 25,326 cards were added to catalogs and self lists, and 12,947 periodical parts were entered; loans totaled 10,225. There were 820 volumes sent to the bindery, and 1,010 volumes were repaired in the Museum. The most urgent of the library's needs continues to be more and better-arranged shelf room. There is also need of an increase in the library staff for cataloging and for systematic work on the large collection of duplicates.

Respectfully submitted.

A. Wetmore, *Secretary.*

APPENDIX 1

REPORT ON THE UNITED STATES NATIONAL MUSEUM

SIR: I have the honor to submit the following report on the condition and operation of the United States National Museum for the fiscal year ended June 30, 1946.

Appropriations for the operation of the National Museum for the year totaled $991,053, including funds for the increase, study, exhibition, and preservation of the national collections; for maintenance, repair, operating, and guarding all the buildings of the Smithsonian group; and for printing and binding. This amount represented an increase of $52,059 over the previous year.

COLLECTIONS

Approximately 379,000 specimens came to the Museum's collections during the year, received in 1,594 separate lots. The five departments registered specimens as follows: Anthropology, 9,026; biology, 320,037; geology, 45,163; engineering and industries, 1,480; history, 3,600. Most of the accessions were acquired as gifts from individuals or as transfers by Government departments and agencies. The complete report on the Museum, published as a separate document, includes a detailed list of the year's acquisitions, of which the more important are summarized below. Catalog entries in all departments now total 18,820,000.

Anthropology.—Prehistoric specimens received derived from such diverse parts of the world as Trans-Jordan, Italy, Ecuador, México, and the United States. They include 6,765 artifacts from protohistoric Indian sites in Kansas and adjoining States; 226 specimens from Ezion-geber, seaport to King Solomon's copper smelters, on the north shore of the Gulf of Aqabah, Trans-Jordan; a carefully documented series of 193 potsherds from surface sites throughout Trans-Jordan; 486 diverse artifacts from the highlands of México; 149 stone, earthenware, and copper artifacts from the former Cherokee region of Tennessee and North Carolina; 17 earthenware vessels of Daunian ware from Apulia, Italy; and a hammered ox with cut-out figures from Loja Province, Ecuador.

In ethnology, major documented field collections came from Melanesian villages of northeastern New Guinea, including objects of

many different kinds, some of which were hitherto unrepresented in the Museum's collections. A unique specimen in the form of a carved altar stone was presented by Admiral William F. Halsey, who had received it from a New Caledonian native chief. Other important ethnologic material came from the Southern Shan States, Korea, Java, and Sumatra. The North American Continent was represented by two outstanding accessions: one a collection of basketry, skin garments, and dance robes obtained in 1890 from the Hupa Indians of central California and from the Indians of the Great Plains, and the other a collection of weavings from the Navaho and Chilkat Indians. A specimen of antiquarian interest was a copy of the Holy Bible, with the Apocrypha, which was printed from stereotype plates originally used for the third (1819) edition of the Isaac Collins Bible. In addition, several dozen pieces of antique glassware were added to the ceramics collections. The section of period art and textiles received an important collection of 10 pieces of Belgian needlepoint and bobbin-made laces dating from the period of World War I.

To the physical anthropology division came about 430 specimens of Indian skeletal remains from various counties in Illinois, Arkansas, and Missouri, and also skeletal material from Calhoun, Jersey, and St. Claire Counties, Ill. Twenty-one cleared human fetuses were added to the valuable embryological collection received last year.

Biology.—Nearly twice as many biological specimens were received this year as the previous year.

Large numbers of birds and mammals from the South Pacific region and the Orient came by transfer from the Army Medical School, the Naval Medical School, and the U. S. A. Typhus Commission, while several hundred North American mammals and birds were transmitted by the United States Fish and Wildlife Service. Five handsome bearskins and skulls and an unusually well-prepared skeleton of a beaked whale from La Jolla, Calif., were among other outstanding mammalian gifts. Ornithological field work in Colombia under the W. L. Abbott fund yielded about 1,350 birds to the Museum's collections. Nearly 650 birds were collected for the Museum in Darién, Panamá, and 60 from the atom-bomb test site at Bikini Atoll. Other important avian specimens from Admiralty Islands, Manchuria, Ceylon, Perú, Venezuela, and Canada found their way to the Museum's division of birds. Reptiles and amphibians were added to the number of 2,177, about two-thirds of which were received from the Naval Medical Research Unit No. 2 or from Service personnel. In addition, about 125 herpetological specimens resulted from the Smithsonian Institution-National Geographic Archeological Expedition in México; 85 came from a donor in Haiti; and 20 taxonomically important frogs from Brasil.

About 20,000 specimens of fishes were received during the year, among which were the following large lots: About 3,800 from the Marianas, collected by the Naval Medical Research Unit No. 2; about the same number transferred from the United States Fish and Wildlife Service, 1,000 from Chile, and 2,800 from Louisiana and Texas; and 2,200 fresh-water fishes from southern California. Smaller lots containing much fine material, including many paratypes, came from Australia, Venezuela, Colombia, Guatemala, the Philippines, the South Pacific, California, and Baja California, through the generosity of various donors.

Several large lots of insects were received, the most important one both scientifically and economically being a collection of more than 10,000 mosquitoes and 4,000 slides of chigger-mites from various Pacific islands and Burma, transferred from the Naval Medical Research Unit No. 2 and the U. S. A. Typhus Commission. Another 10,000 miscellaneous insects collected on Guam were contributed by various members of the armed forces. While cooperating with the Mexican Government in an economic geological survey in México, Dr. W. F. Foshag, the Museum's curator of mineralogy and petrology, obtained 2,500 miscellaneous insects for the National Museum. The largest entomological accession of the year was a transfer of about 140,000 specimens from the United States Department of Agriculture, a large part of which represents insects sent in by Army and Navy sources for identification.

To the division of marine invertebrates came more than 5,000 new specimens. Of these about 1,250, mostly crustaceans, were sent by members or former members of the armed services stationed in the Pacific region, the Aleutian, Hawaiian, and Marshall Islands, Okinawa, and Japan. Other accessions of interest included a lot of 950 invertebrates collected in Guam, Rota, Okinawa, Pelelieu, and the Palau Islands and forwarded by the Naval Medical Research Unit No. 2; 25 barnacles from the Bureau of Ships; and small lots of crustaceans and leeches from the Army Medical Museum, the Army Medical School, and the Eighteenth Medical General Laboratory. Included in the material received in the division of mollusks were a considerable number of type specimens. Transfers from the Army Medical Museum, the Army Medical School, and the Navy Medical School yielded 850 mollusks, chiefly fresh-water gastropods, from the Philippines, Okinawa, and Guam. Over 4,000 Japanese and Philippine mollusks came from one donor, nearly 900 Philippine shells from another, 850 land and fresh-water shells from Virginia from another, and 1,840 Colombian mollusks from still another. In all, about 20,000

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mollusks were added to the collections. The helminthological collections were materially enhanced by the generous bequest of the lifetime collections of the late Dr. Henry Baldwin Ward, distinguished parasitologist; 8,000 lots of helminths, including many types, were received from Professor Ward's daughter.

The number of plants received jumped from about 30,000 in 1945 to nearly 42,000 in 1946, largely as a result of extensive collections made by members of the armed forces while serving in the Admiralty, Aleutian, Caroline, Galápagos, Solomon and Philippine Islands, Guam and other Marianas, Japan, Okinawa, New Guinea, Burma, and France. The herbarium received 3,100 Burman plants by transfer from the U. S. A. Typhus Commission, and over 300 Ecuadorian plants from the Foreign Economic Administration. Other important lots, from private donors, came from Colombia, Venezuela, and México. Noteworthy botanical collections totaling 6,800 specimens were made for the Museum in Panamá and the Dominican Republic. In addition, about 5,000 plants were added to the herbarium as a result of exchanges arranged with other institutions, in Europe, South America, Cuba, Canada, and the United States.

Geology.—The department of geology accessioned 45,000 specimens during the year, nearly double the number for last year, about 90 percent of these being assigned to the division of invertebrate paleontology and paleobotany.

The mineral collection continued its growth, partly through the several Smithsonian funds available for the purchase of specimens, but largely through gifts. Three new minerals not hitherto represented—cattierite, valsite, and salesite—were donated, while the new species sampleite was obtained by exchange. The mineral collection of Dr. Whitman Cross, containing specimens from many old classical localities in Europe and the western United States, came as a gift and added much historically interesting material. Geological field work in México by Curator W. F. Foshag yielded fine sal-ammoniac crystals and other sublimates from the newborn volcano Parícutin, and examples of rare mercury minerals from Huahauxtla, Guerrero. The principal addition to the rock series also came from Dr. Foshag's visits to Parícutin and comprised an extensive collection of lavas, ash, and other eruptive products. Extensive sets of mercury ores, copper, and fluorspar were also included in Dr. Foshag's Mexican material.

Three meteorites not previously represented in the Museum's series were added: A slice of the Pine River, Wis., meteorite; a 3,576-gram specimen of the Dimmitt, Castro County, Tex., fall; and a piece of the Livingston, Tenn., occurrence.

The most important additions to the gem collection came as transfers from the Procurement Division of the Treasury Department. They include a large blue topaz, three fine aquamarines, an amethyst, and a tourmaline. Other outstanding gems were procured through the Canfield, Roebling, and Chamberlain funds.

The following were noteworthy additions to the collections of fossil invertebrates: 367 type specimens of Middle Cambrian brachiopods and trilobites from Montana; 425 Middle Ordovician specimens from the unique cryptovolcanic structure at Kentland, Ind.; 750 bryozoans, corals, and other classes from the Middle Ordovician of Virginia and Tennessee; and 700 Devonian brachiopods from southwestern Ontario. From the Upper Paleozoic rocks donations included 180 Pennsylvanian and Permian gastropods from New Mexico, 500 Pennsylvanian fusulines, about 5,000 Pennsylvanian fossils from near St. Louis, Mo., and 250 from near Moab, Utah. Gifts through the Springer and Walcott funds added other worthy Paleozoic fossils, including 2,100 Cenozoic mollusks from the Lord Calvert collection. Field trips conducted under the Walcott fund by Curator G. A. Cooper and his associates resulted in about 5,000 specimens of Ordovician invertebrates from Alabama, Georgia, Tennessee, and Virginia, a similar number from the Mississippian and Pennsylvanian rocks of central Texas, and an equally large lot of Upper Paleozoic fossils from west and central Texas, together with 400 blocks from west Texas containing silicified fossils for etching. The division also received 3,500 slides of Cretaceous Foraminifera from Arkansas and 50 from Perú. Other gifts included important Cenozoic material, for example: 4,000 fossil fresh-water shells, 1,070 Tertiary fossils, and about 75 Pleistocene fresh-water gastropods from Utah. Important collections transferred from the United States Geological Survey comprised about 3,700 types of Carboniferous and Permian fossils described by the late Dr. George H. Girty; 200 Jurassic invertebrates from Wyoming; 585 Cretaceous ammonites from Wyoming; and 1,000 Devonian and Mississippian fossils from the Central Mineral Region of Texas. In addition, several hundred specimens were received by exchange with other institutions and individuals.

In the division of vertebrate paleontology there was a decrease of material coming in, owing largely to the fact that no expeditions to obtain fossil vertebrate specimens could be sent out until just before the year's end. The extreme rarity of fossil bird remains made noteworthy the gift of vertebrae, mandibles, and other bones of the double-crested cormorant *Phalacrocorax auritus* from Pleistocene deposits in Florida. Five fossil examples of the puzzling egg capsules of chimaeroid fishes from the Upper Cretaceous rocks of México and

elsewhere were transferred from the United States Geological Survey. Other fossil vertebrate additions included a mammoth tooth found in the mountains of Ecuador, 13 fossilized specimens of the fish *Mallotus villosus* from western Greenland, and a partial skull of the porpoise *Eurhinodelphis* from the Calvert formation in the Chesapeake Bay region.

Engineering and industries.—This department experienced a subnormal year in the matter of new accessions, there being a drop from last year of about 50 percent in total number of specimens received. Among the year's total of 1,480, however, there are several worthy of special mention.

In engineering, a group of three Hollerith electromechanical tabulating machines and several high-speed precision gages were presented by two interested corporations. The United States Maritime Commission transferred six models of ships representing classes of standard cargo and passenger vessels procured by the Commission during the war. There also came a scale model of the Baldwin-Westinghouse, geared, steam-turbine locomotive, first introduced in 1945. In the section of aeronautics two groups of models were received—one a collection of 19 United States Navy types of the period following World War I, transferred by the Bureau of Aeronautics, and the other a collection of aircraft recognition models made by school children early in World War II, presented by the United States Office of Education.

The Office of the Quartermaster General, Army Service Forces, and the Bureau of Supplies and Accounts, Navy Department, transferred 141 specimens of the various fabrics used by the services in World War II, made according to standard Government specifications. Various manufacturers continued to supply examples of new fabrics to keep the textile exhibits up to date. Two early commercial sewing machines were received, dating from 1858 and 1874. A number of additions were made to the collections of early homecraft textiles, including coverlets, carpeting, and needlework.

Specimens added to the collections representing the chemical and agricultural industries included examples of the applications of the newer plastics, and an 1885 Babcock milk tester. The most valuable accession in the division of medicine and public health was a specially designed exhibit illustrating the contributions of the mineral kingdom to materia medica. In the section of woods and wood technology an outstanding gift was a series of 100 British Honduras woods, from the Honduran conservator of forests. Other desirable wood specimens came from the Philippine Islands and Perú.

Charles W. Dahlgreen, artist, presented 18 additional copper plates of his etchings and drypoints, making 94 in all, which are being used for printing the Smithsonian edition of his work (described in last year's report). Mr. Dahlgreen also gave 126 drypoints and etchings and 1 block print in color, further representative of his life work in the field of printmaking. Another interesting gift in graphic arts was Walter Tittle's "Arms Conference Memorial Folio" containing 25 autographed drypoint portraits of statesmen who attended the Conference on Limitation of Armaments, 1921–22. Historically valuable photographic equipment received included the machines used in Germany as early as 1904 by Dr. Arthur Korn in transmitting photographs by electricity; a radar camera of World War II; and a motion-picture camera and projector dating from about 1885, which came as a loan.

History.—About twice as many specimens were received in the division of history this year as last year. Accessions to the costumes collection were noteworthy. The dresses that since 1915 have represented the administration of President Benjamin Harrison in the collection of dresses of mistresses of the White House, were presented to the Museum. Mrs. Calvin Coolidge presented a fan, necklace, and handkerchief to go in the case containing the dress of Mrs. Coolidge presented by her in 1930. The general collection of American period costumes was enriched by the addition of four dresses dating, respectively, from 1814, 1855, 1861, and 1894—each in an excellent state of preservation and each a fine example of the period it represents.

The military collection was increased by the gift of a Japanese parachute found in New Guinea. A collection of United States Army insignia and a series of topographic maps, all of World War II, were received from the War Department. To the naval collection were added 37 models of United States, French, and British warships of World War II, and more than 700 pieces of naval insignia, from the Navy Department.

The numismatic collection was increased by about 100 coins and medals and the philatelic collection by 1,700 postage stamps.

EXPLORATIONS AND FIELD WORK

Although field explorations during the year were not extensive, they represented a return toward the regular schedule of such activities in times of peace.

Dr. E. A. Chapin, curator of insects, in connection with the State Department's program for the promotion of cultural relations with

scientists in other American countries, left on April 25 for Colombia. During May he was at the Instituto de Ciencias Naturales of the National University in Bogotá, where he was occupied in consultations with government entomologists in connection with cooperative investigations, particularly on certain groups of Coleoptera of economic importance. There was opportunity at the same time for field studies in a variety of climatic zones ranging from Villavicencio in the tropical lowlands at the eastern base of the Andes to the high mountain passes above Bogotá. In June, Dr. Chapin continued to Medellín, where he was occupied for several days with Prof. F. Luis Gallego in examining insect collections at the Facultad de Agronomía. This was followed by similar work in Cali and Palmyra with Belisario Losada, and at Popayán in the Universidad del Cauca. He returned to Washington on June 30.

Dr. Robert R. Miller, associate curator, division of fishes, was assigned to a survey of the fish and game resources of Guatemala, a cooperative project of the Fish and Wildlife Service of the Department of the Interior and the Guatemalan Government, with the participation of the Smithsonian Institution. Investigations began in March and continued until the end of May, Dr. Miller being occupied mainly with studies of the fresh-water fishes of the plateau area. Collections were made principally above 3,000 feet, covering many lakes and streams. In addition there was opportunity for briefer studies along the middle Motagua River and in Lake Ysabal. The work in the main was in the nature of reconnaissance with expectation of continuing in greater detail another season. The present collections, now under study, are yielding much data of interest.

In connection with the atom-bomb tests at Bikini, Dr. Leonard P. Schultz, curator of fishes, and Dr. J. P. E. Morrison, assistant curator, division of mollusks, left in February to begin a detailed survey of the fauna of the atoll. It was expected that a careful check would be made of conditions following the bomb explosions. The studies of Dr. Schultz are concerned with fishes in the lagoon and along the reefs to obtain data on the kinds present and on their relative abundance. Dr. Morrison is occupied with mollusks and other marine invertebrates on the reefs, and also with detailed collections of the land animals present, including the birds. There has been opportunity also for comparative studies at several other atolls in the Marshall Islands. The extensive series of specimens already obtained will serve as an index to the forms found, and will be especially important also as the first collections in the Museum from this area. This work was still under way at the close of the year and will be reported in more detail next year.

At the beginning of March, Dr. Alexander Wetmore, Secretary of the Smithsonian Institution, accompanied by W. M. Perrygo, scientific aid, went to Panamá where they were occupied briefly in checking on the fauna on San José Island in the Perlas group, where the Smithsonian made extended studies in 1944. Following this they examined the Canal Zone Biological Area on Barro Colorado Island in Gatún Lake, an agency for which Dr. Wetmore serves as executive officer. They proceeded on March 14, through the assistance of Maj. Gen. H. R. Harmon, Commanding General of the Sixth Air Force, by plane to the auxiliary airfield at Jaqué in eastern Darién. Here they remained until April 16 making detailed collections and studies of the bird life of the coastal area. Ranges of broken hills and the lowlands along the Río Jaqué were a fertile field, so that the 640 specimens obtained during 30 days of field work include representatives of 170 species. These supplement excellently earlier collections under Smithsonian auspices in eastern Darién. The party returned to Washington on April 21.

M. A. Carriker, Jr., traveling under the W. L. Abbott fund of the Smithsonian Institution, this season covered the high páramos of the Sierra Nevada de Santa Marta, Colombia, entering the area in January through San José and San Sebastián de Rábago. Traveling in part with pack oxen, Mr. Carriker worked first at Chinchicuá where there was some forest in addition to the open slopes. At the beginning of February he camped at Simínchucuá at a higher elevation where morning temperatures were frequently near freezing, with ice not uncommon. The next camp called Mamancanaca was at 10,500 feet in a region of glaciated valleys and old moraines. Four lakes at successively higher levels lay below the snow fields at 15,350 feet. Birds in the main were found below 12,000 feet. A further camp was located early in March at 10,000 feet on the headwaters of the Río Guatipurí, and in April still another, farther down the same river at the little Indian hamlet of Chendúcua. The expedition was highly successful, obtaining fine series of the high-mountain birds, including many not previously represented in the Museum and several that are new to science. Other collections made at lower elevations give representation of the better-known Santa Marta races that make a highly desirable addition to our series from northern Colombia.

In the department of geology Dr. G. A. Cooper, curator of invertebrate paleontology and paleobotany, accompanied by Dr. J. Brookes Knight, research associate, left on June 12 for Austin, Tex., and from there proceeded by auto to the Glass Mountains in west Texas. At that point the party was joined by Dr. R. C. Moore, of the University of Kansas. The three cooperated in collecting blocks of Permian

limestone containing fossils in various parts of the mountains. Dr. Preston E. Cloud joined the party on July 19 and served as leader for further work in the Central Hill country of Texas to collect Mississippian, Devonian, and Pennsylvanian fossils. After a week in this region the party divided, Dr. Moore to return to Kansas and Dr. Cooper and Dr. Knight to join Mrs. J. H. Renfro and Millicent Renfro for four days of collecting in the incomparable Pennsylvanian fossil deposits of Jack County, Tex. Work in the field ended on August 5 after obtaining more than 5 tons of blocks of silicified material to be cleaned by etching with acid, and about 5,000 specimens of invertebrate fossils from central Texas.

On October 1 Dr. Cooper, accompanied by associate curator Byron N. Cooper and Y. Wang, a member of the Geological Survey of China working temporarily at the National Museum, left for the southern Appalachians and the Central Basin of Tennessee. Dr. C. O. Dunbar and Percy Morris of Yale University joined the party at Woodstock, Va. After several days in southwestern Virginia they continued west to Murfreesboro, Tenn., and then to east Tennessee for work near Knoxville. From this vantage point forays were made into various parts of the Ordovician belts of east Tennessee for collecting and study. On October 16 Wang and the two Coopers continued south to Pratts Ferry about 35 miles south of Birmingham, Ala., and from here worked northeast along the Ordovician belts through northeastern Georgia and on into eastern Tennessee and Virginia. The party returned to Washington on November 14. This trip proved most profitable in checking on Ordovician stratigraphy. About 5,000 specimens, including considerable new material, were collected.

On February 7, 1946, Dr. Cooper again left Washington for Austin, Tex., where he joined Dr. Preston E. Cloud, of the Geological Survey, for further studies and collecting in the central hill country. The two visited many localities in the neighborhood of Burnett, San Saba, Mason, and Brady. Many fine Mississippian fossils were collected and Pennsylvanian fossils were also obtained in several places. Dr. Cooper returned to Washington on February 24 with some 5,000 specimens that form a fine representation of these beds.

The Museum's part of the three geological expeditions described above was financed from the income of the Walcott fund.

Dr. C. L. Gazin, curator of vertebrate paleontology, with Franklin Pearce, scientific aid, as assistant, left Washington on May 23, in a truck available through the cooperation of the United States Army, on an expedition into the Western States, to obtain additional fossil mammal remains from Paleocene deposits and make further collections of fossil lizards from the Cretaceous in central Utah, as well as

to continue collecting in the Middle Eocene Bridger beds of southwestern Wyoming. These formations have been untouched by collecting parties during the war years and it is expected that weathering will have exposed many additional fossils. The expedition will continue into the next fiscal year, when several fossil localities in the Wind River Basin reported by geological parties of the United States Geological Survey will be investigated. The cooperation of the Army in the loan of the truck is much appreciated since it proved to be a large factor in making the expedition possible. This expedition is another project under the Walcott fund of the Smithsonian Institution.

Dr. W. F. Foshag, curator of mineralogy, spent the first quarter of the year in México concluding field work there, and returned to Washington on October 8. This work on the mineral resources of that country and on Parícutin Volcano was a joint project of the National Museum and the United States Geological Survey in collaboration with the Committee for the Study of Mineral Resources of Mexico. Field studies were completed on the fluorspar deposits of the Tasco District, State of Guerrero, the mercury-copper deposits of Las Fraguas, and the copper deposits of Oropeo, State of Michoacán, with the assistance of Mexican geologists of the committee. Field work in geochemical studies at Parícutin Volcano was continued.

On request from General MacArthur, Dr. Foshag and E. P. Henderson, associate curator in mineralogy, on May 25 went to Tokyo to undertake classification of gem stones under the Army's jurisdiction.

MISCELLANEOUS

Visitors.—An increase of 384,877 visitors to the Museum buildings was recorded over the previous year, the totals being 2,115,593 for 1946 and 1,730,716 for 1945. June 1946 was the month of largest attendance with 246,012 visitors; August 1945 the second largest with 216,801. Records for the four buildings show the following number of visitors: Smithsonian Building, 430,760; Arts and Industries Building, 852,080; Natural History Building, 606,310; Aircraft Building, 226,443.

Publications and printing.—The sum of $43,000 was allotted the National Museum for its publication and printing requirements for the year 1945–46, the same amount as for the previous year. Of this, $34,000 was used for printing Bulletins, Proceedings, and Annual Reports; the rest for binding and for the salary of the Museum printer. Thirteen publications were issued—two Annual Reports, six Bulletins, and five Proceedings papers. A list of these is given in the report on publications, appendix 10.

The distribution of volumes and separates to libraries and other institutions and to individuals aggregated 32,887 copies.

Special exhibits.—Eleven special exhibits were held during the year in the foyer and adjacent space of the Natural History Building, under the auspices of various educational, scientific, recreational, and Government groups. In addition, the department of engineering and industries arranged 24 special displays—12 in graphic arts and 12 in photography.

CHANGES IN ORGANIZATION AND STAFF

The end of the war, and the ensuing order of the President directing the Civil Service Commission to resume operations under the civil-service rules, resulted in a considerable number of personnel changes, especially during the transitional period from war-service to probational appointments. During the year several reemployed annuitants, who, with long experience and special qualifications, had remained in active service because of the wartime manpower situation, were retired.

In the department of anthropology, John C. Ewers was appointed associate curator in the division of ethnology on June 3, 1946. Dr. Marshall T. Newman resumed his duties of associate curator in the division of physical anthropology on January 7, 1946, after his release from active military service.

Dr. William R. Maxon, curator, division of plants, retired on May 31, 1946, and was succeeded by Ellsworth P. Killip. On April 30, 1946, Dr. Paul Bartsch, curator, division of mollusks, retired. Other changes in the department of biology were the reappointment, after a wartime furlough to private industry, of Dr. Richard E. Blackwelder, associate curator, division of insects, on November 13, 1945. The department lost by resignation the services of Mrs. Marie P. Fish, scientific aid in the division of fishes, and Mrs. Mildred S. Wilson, assistant curator, division of marine invertebrates, on May 15, 1946, and June 14, 1946, respectively.

The vacancy in the division of vertebrate paleontology caused by the death of Charles W. Gilmore, curator, was filled by the appointment of Dr. Charles L. Gazin on January 21, 1946, and Arlton C. Murray was advanced to scientific aid on March 11, 1946. An addition to the staff of the division of invertebrate paleontology and paleobotany as associate curator was Dr. Alfred R. Loeblich, Jr., on May 31, 1946.

Having been released from active military service, Frank A. Taylor, curator, division of engineering, returned to his duties in the Museum on March 4, 1946. The department of engineering and industries, at

the close of the fiscal year, lost three employees by retirement, as follows: Dr. Frederick L. Lewton, curator, and Mrs. Elizabeth W. Rosson, assistant curator, division of crafts and industries; and Dr. Arthur J. Olmsted, associate curator, section of photography.

Four honorary appointments were made during the year: Dr. Paul Bartsch, associate, division of mollusks; Dr. William R. Maxon, associate in botany; Mrs. Mildred S. Wilson, collaborator in copepod Crustacea; and Dr. J. Brookes Knight, research associate in paleontology.

Under the superintendent of buildings and labor, Walcutt C. Hamer was promoted to assistant mechanical superintendent (foreman of cabinet shop), the position made vacant by the transfer of Rafe A. Watkins to the Army Map Service, and James I. Simpson was assigned the duties of the assistant foreman of cabinet shop effective July 16, 1946. Following retirement for disability on February 20, 1946, of William H. Chism, James C. Clarke was promoted to principal guard (lieutenant), and Edward Zuranski was assigned as principal guard (sergeant) on March 10, 1946. Other additions to the guard officer group were the promotions of Bascom F. Gordon to principal guard (lieutenant) and William H. Baird and Arnold F. Shortridge to principal guards (sergeants) on June 30, 1946.

During the year the following Museum employees returned to their positions after having completed military duty: Edward Zuranski, September 9, 1945; John L. Theunissen and George V. Worthington, October 7, 1945; Charles E. Stousland, November 5, 1945; Joseph Singleton, December 3, 1945; Dr. Charles L. Gazin, December 27, 1945; Clyde E. Bauman, January 2, 1946; Samuel T. Fetterman, January 6, 1946; Dr. Marshall T. Newman, January 7, 1946; Walter McCree, January 30, 1946; Joseph R. Burke, Jr., February 20, 1946; Frank A. Taylor, March 4, 1946; Oliver N. Armstead, March 6, 1946; Robert L. Bradshaw and John Carl Carter, April 1, 1946.

Sixteen persons were retired during the year, under the Civil Service Retirement Act: Through age, Dr. Paul Bartsch, curator, division of mollusks, on April 30, 1946, after 50 years of service; Dr. Frederick L. Lewton, curator, division of crafts and industries, on June 30, 1946, after 34 years 4 months of service; and Dr. Arthur J. Olmsted, associate curator, division of graphic arts, on June 30, 1946, after 26 years 1 month of service. By optional retirement, Dr. William R. Maxon, curator, division of plants, on May 31, 1946, after 46 years 5 months of service; Mrs. Elizabeth W. Rosson, assistant curator, division of crafts and industries, on June 30, 1946, after 33 years 3 months of service; Edgar J. Harrison, mechanic (painter), on August 31, 1945, after 13 years 5 months of service; Augustus G. Lindsay, guard,

on March 31, 1946, after 20 years 6 months of service; Beverly J. Moore, guard, on June 30, 1946, after 3 years 9 months of service; Henry Hicks, laborer, on September 30, 1945, after 23 years 4 months of service, and Mrs. Mary W. Paige, charwoman, on May 31, 1946, after 12 years 3 months of service. Through disability, William H. Chism, lieutenant of guard, on February 20, 1946, after 13 years 10 months of service; Nicola DiGennaro, guard, on July 14, 1945, after 20 years 10 months of service; Leo F. Lennartz, guard, on February 26, 1946, after 5 years 4 months of service; John W. Lockhart, guard on October 15, 1945, after 11 years 3 months of service; Bror O. Olson, guard, on May 31, 1946, after 18 years 1 month of service; and Mrs. Nellie Butler, laborer, on November 30, 1945, after 26 years 11 months of service.

Through death the Museum lost six employees from its active roll during the year: Charles W. Gilmore, curator of vertebrate paleontology, on September 27, 1946, after 41 years 10 months of service; Thomas J. Horne, preparator, on December 26, 1945, after 34 years 9 months of service; George Boylen, mechanic (electrician's helper) on November 28, 1945, after 3 years 9 months of service; Thomas C. Watts, laborer, on October 14, 1945, after 18 years 2 months of service; Roland S. Woodland, laborer, on October 1, 1945, after 11 years of service; and Fannie H. Nedd, laborer, on January 29, 1946, after 12 years of service.

Respectfully submitted.

ALEXANDER WETMORE, *Director.*

THE SECRETARY,
Smithsonian Institution.

APPENDIX 2

REPORT ON THE NATIONAL GALLERY OF ART

SIR: I have the honor to submit, on behalf of the Board of Trustees of the National Gallery of Art, the ninth annual report of the Board, covering its operations for the fiscal year ended June 30, 1946. This report is made pursuant to the provisions of Section 5 (d) of Public Resolution No. 14, Seventy-fifth Congress, First Session, approved March 24, 1937 (50 Stat. 51).

ORGANIZATION AND STAFF

During the fiscal year ended June 30, 1946, the Board consisted of the Chief Justice of the United States, the Secretary of State, the Secretary of the Treasury, the Secretary of the Smithsonian Institution, ex officio, and five general trustees, Samuel H. Kress, Ferdinand Lammot Belin, Duncan Phillips, Chester Dale, and Paul Mellon.

At its annual meeting held on February 11, 1946, the Board reelected Samuel H. Kress as President, and Ferdinand Lammot Belin as Vice President, to serve for the ensuing year. The executive officers continuing in office during the year were:

Huntington Cairns, Secretary-Treasurer.
David E. Finley, Director.
Harry A. McBride, Administrator.
Huntington Cairns, General Counsel.
John Walker, Chief Curator.
Macgill James, Assistant Director.

Donald D. Shepard continued to serve during the year as Adviser to the Board.

During the year Margaret D. Garrett resigned as Chief of the Inter-American Office.

The three standing committees of the Board, provided for in the bylaws, as constituted at the annual meeting of the Board, held February 11, 1946, were:

EXECUTIVE COMMITTEE

Chief Justice of the United States, ex officio, Fred M. Vinson, Chairman.
Samuel H. Kress, Vice Chairman.
Ferdinand Lammot Belin.
Secretary of the Smithsonian Institution, Dr. Alexander Wetmore.
Paul Mellon.

FINANCE COMMITTEE

Secretary of the Treasury, ex officio, John W. Snyder, Chairman.
Samuel H. Kress, Vice Chairman.
Ferdinand Lammot Belin.
Paul Mellon.
Chester Dale.

ACQUISITIONS COMMITTEE

Samuel H. Kress, Chairman.
Ferdinand Lammot Belin, Vice Chairman.
Duncan Phillips.
Chester Dale.
David E. Finley, ex officio.

The permanent Government positions on the Gallery staff are filled from registers of the United States Civil Service Commission, or with its approval. On June 30, 1946, the permanent Government staff of the Gallery numbered 298 employees, as compared with 245 employees on June 30, 1945; the increase of 53 employees is due chiefly to Public Law 106 (Federal Employees Pay Act of 1945) which placed Government operations on a 40-hour week.

During the past year 21 veterans returned to duty on the Gallery staff, having obtained discharges from the armed forces.

Throughout the year a high standard of operation and maintenance of the Gallery building and grounds and protection of the Gallery's collections of works of art has been sustained.

APPROPRIATIONS

For salaries and expenses for the upkeep and operation of the National Gallery of Art, the protection and care of works of art acquired by the Board of Trustees, and all administrative expenses incident thereto pursuant to the provisions of Section 4 (a) of Public Resolution No. 14, Seventy-fifth Congress, First Session, approved March 24, 1937 (50 Stat. 51), the Congress appropriated for the fiscal year ended June 30, 1946, the sum of $783,707. This amount includes the regular appropriation of $583,207, and two supplemental appropriations, one in the sum of $184,500 required to meet increased pay costs authorized by Public Law 106 (Federal Employees Pay Act of 1945), and the other in the sum of $16,000, required to cover the costs of within-grade promotions, reallocation of positions, returning veterans, and terminal leave.

From these appropriations the following expenditures and encumbrances were incurred:

Personal services	$661,187.45
Printing and binding	4,936.79
Supplies, equipment, etc	117,256.77
Unencumbered balance	325.99
Total	783,707.00

In addition to the above-mentioned appropriations, the Gallery received the sum of $35,000 from the Department of State to cover expenses during the fiscal year of the Inter-American Office of the Gallery for the promotion of art activities between the United States and the Latin American republics.

The Gallery also received from the War Department an allotment of $24,000 to be used for the preservation and care of works of art owned by foreign governments which have been placed in temporary custody of the National Gallery of Art.

ATTENDANCE

During the fiscal year 1946, 1,947,668 visitors came to the Gallery building, an average daily attendance of 5,365 people, as compared with 5,711 during 1945, thus showing an annual attendance slightly less than in the previous year. The greatest number of visitors in any one day since the opening of the Gallery was 27,823 on Sunday, October 21, 1945.

The Sunday evening openings, featuring free concerts in the Gallery's East Garden Court, have continued to be exceedingly popular throughout the year.

On May 15, 1946, the Servicemen's Room (Founder's Room), was changed so that it might be used by the general public as a lounge, and it is now in constant use by visitors to the Gallery for writing, reading, and relaxation.

The lifting of travel restrictions since the end of the war has brought a sudden influx of groups of elementary and high school children to view the collections of the Gallery; and during March, April, May, and June of this year 181 groups of young students from the eastern, southern, and midwestern States attended special tours through the Gallery.

PUBLICATIONS

The fiscal year which ended June 30, 1946, saw a considerable expansion in the publishing program of the National Gallery of Art. The second edition of "Masterpieces of Painting from the National Gallery of Art," by Huntington Cairns and John Walker, was placed

on sale on November 1, 1945, and, despite a rise in price made necessary by increased production costs, has continued to sell so well that a third edition is now being printed and a fourth is under discussion.

A catalog entitled "Paintings and Sculpture from the Kress Collection," comprising 200 halftone reproductions, was issued in February 1946, in connection with the opening of the new galleries containing recent additions to the Kress Collection. The National Gallery of Art, the Harvard College Library, and Pantheon Books collaborated in the publication of "Drawings from Ariosto by Fragonard," by Elizabeth Mongan of the Gallery staff, Philip Hofer, and Jean Seznec—a distinguished example both of scholarship and printing. Huntington Cairns, Secretary of the National Gallery of Art, edited a collection of George Saintsbury's essays in a volume entitled "French Literature and Its Masters," published by Alfred A. Knopf in connection with the centenary of Saintsbury's birth.

Articles were published by Huntington Cairns on Sociology and the Social Sciences, in the volume "Twentieth Century Sociology"; The Juristic Bases for International Law, in Iowa Law Review, May 1946; A Logician of Science, in The Sewanee Review, January 1946; Proust and Painting, in The Art Bulletin, March 1946; Methodology of the Social Sciences, in the University of Chicago Law Review, December 1945; by John Walker on the protection and salvage of art, in the National Geographic Magazine, January 1946; by Fern Rusk Shapley on two paintings in the Gallery's collection in Gazette des Beaux-Arts, July 1945, and the Art Quarterly, winter 1945.

Mr. Cairns also contributed an article, Philosophy as Jurisprudence, to "Essays in Honor of Roscoe Pound," to be published by Oxford University Press in the fall of 1946. Charles Seymour, Jr., submitted an article to the Henri Focillon memorial issue of the Gazette des Beaux-Arts to be published in December 1946. A comprehensive article on the Gallery, its collections, installations, and history was prepared by Joseph Blake Eggen for early publication in Mouseion.

Volumes by members of the Gallery staff in press by the end of the year included "The Limits of Art," by Mr. Cairns, an extensive compilation of selections of poetry and prose that have been held to be the greatest of their kind in critical literature from Aristotle to the present; "Le Chevalier Delibere," with an introduction by Elizabeth Mongan; "Three Centuries of American Painting," by James Lane; and the first of a new series of handbooks, with special reference to the collections of the National Gallery of Art, entitled "The Search for Line," by Lois Bingham, of the educational staff.

Work in preparation for early publication progressed on a book being compiled by Erwin Christensen which will give, under the title "Made in America," an over-all picture of the Index of American De-

sign. Also in preparation for publication were Mr. Walker's monograph on Giovanni Bellini's "Feast of the Gods," in collaboration with Edgar Wind, and a companion volume to "Masterpieces of Painting" on the Gallery's sculpture compiled by Mr. Seymour. Also brought to completion in preparation for publication in the near future was the first of a series of small handbooks on the Widener Collection of decorative arts by Mr. Christensen. Smaller picture books of the Mellon and Widener Collections of paintings and sculpture were also in preparation for publication. For progress on the Gallery catalog, see under Curatorial Department.

Since the Gallery was opened to the public in 1941, well over 2,000,000 postcards of works of art in the Gallery's collections, and more than 400,000 of the Gallery's 11-inch by 14-inch color reproductions have been sold.

The policy of furnishing moderately priced catalogs, color reproductions of fine quality, and other publications, has been continued. Another new edition of the General Information booklet, which is made available to visitors without charge, was issued during the year. Publishers of large collotype reproductions of paintings in the National Gallery of Art have added 15 new titles to their lists during the fiscal year 1946, making a total of 38 of these large reproductions now available.

CONSTRUCTION OF NEW GALLERIES

The contract for the construction of six new gallery rooms, mentioned in the 1945 annual report, was completed during the fiscal year 1946. This construction was carried forward in keeping with the recommendations of the Committee on the Building and a resolution of the Board of Trustees. Three of the rooms are in the east wing of the building and three are in the west wing. These galleries are finished and decorated in a manner similar to the gallery rooms adjacent to them, with the exception of the specially designed room for the exhibition of the Luini panels in the Kress Collection. The work was completed and the galleries were opened to the public on February 2, 1946, for the special opening exhibition of additions to the Kress Collection.

INSTALLATION OF ADDITIONAL AIR-CONDITIONING EQUIPMENT

The gradual opening of additional spaces in the Gallery building and the construction of the six new galleries have made it necessary to augment the air-conditioning equipment in the building by an additional compressor machine. In keeping with recommendations of the Committee on the Building and a resolution of the Board of Trustees,

and with funds donated for the purpose, the Gallery has entered into a contract for the manufacture and installation of this equipment. It is expected that the contract will be completed during the present fiscal year. This fourth compressor machine now being installed will air-condition all the remaining unfinished spaces in the Gallery building.

CUSTODY OF PAINTINGS FROM GERMANY

On December 14, 1945, the late Honorable Harlan Fiske Stone, Chief Justice of the United States and Chairman of the Board of Trustees of the National Gallery of Art, announced that at the request of the Secretary of State, the Trustees of the National Gallery of Art had agreed to accept custody of the 202 paintings from German museums which were to be brought to this country for safekeeping until conditions in Germany insuring their proper care were reestablished. These paintings arrived at the Gallery on December 7, 1945, having been transported to this country with great care by the United States Army; and they are now stored under the custody of the Trustees in the Gallery's air-conditioned storage rooms until they can be returned to Germany. The following is a list of the paintings which are now stored at the Gallery:

Artist	*Title*
Altdorfer, Albrecht	Departure of the Apostles.
Altdorfer, Albrecht	The Nativity.
Altdorfer, Albrecht	Landscape With a Satyr Family.
Altdorfer, Albrecht	Rest on the Flight Into Egypt.
Amberger, Christoph	The Cosmographer, Sebastian Munster.
Amigoni, Jacopo	Portrait of a Lady as Diana.
Angelico, Fra	Triptych: The Last Judgment.
Antonello da Messina	Portrait of a Young Man.
Austrian c. 1410	The Crucified Christ Mourned by Mary and John.
Austrian c. 1425	The Dead Christ Mourned by Mary and John.
Baldung, Hans (Grien)	Count von Lowenstein.
Baldung, Hans (Grien)	Pyramus and Thisbe.
Baldung, Hans (Grien)	Mourning Over the Body of Christ.
Baldung, Hans (Grien)	Saint George, Saint Catherine.
Baldung, Hans (Grien)	The Adoration of the Magi.
Baldung, Hans (Grien)	Saint Agnes, Saint Mauritius.
Bellini, Giovanni	The Resurrection of Christ.
Bohemian c. 1350	Madonna and Child With Donor.
Bosch, Hieronymus	Saint John on Mount Patmos. Reverse: Passion of Christ.
Botticelli, Alessandro	Madonna and Child With Singing Angels.
Botticelli, Alessandro	Simonetta Vespucci.
Botticelli, Alessandro	Giuliano de' Medici.
Botticelli, Alessandro	Saint Sebastian.
Botticelli, Alessandro	Venus.

Artist	*Title*
Bouts, Dirk	Madonna in Adoration.
Bouts, Dirk (?)	Madonna and Child.
Bronzino, Angelo	Portrait of a Youth.
Bronzino, Angelo	Ugolino Martelli.
Bronzino, Angelo	Portrait of a Young Man.
Brueghel, Pieter, the Elder	Flemish Folk Sayings.
Brueghel, Pieter, the Elder	Pair of Fettered Apes.
Burgkmair, Hans	The Holy Family.
Caracciolo, Giovanni Battista	Two Physicians in the Role of Saint Cosmas and Saint Damian.
Michelangelo da Caravaggio	Conquering Love.
Carpaccio, Vittore	Burial of Christ.
Castagno, Andrea del	The Ascension of Mary.
Chardin, Jean-Baptiste-Simeon	The Draftsman.
Chardin, Jean-Baptiste-Simeon	Still Life With Pheasant.
Christus, Petrus	Saint Barbara Presents a Carthusian Monk to the Madonna.
Christus, Petrus	Lady Talbot.
Joos van Cleve, the Elder	Young Man With a Glove.
Cologne c. 1400	The Life of Christ.
Cologne c. 1350	Diptych: Madonna and Child Enthroned, Crucifixion.
Correggio (Antonio Allegri)	Leda and the Swan.
Cossa, Francesco del	Allegory of the Harvest.
Cranach, Lucas, the Elder	Lucretia.
Cranach, Lucas, the Elder	Rest on the Flight Into Egypt.
Cranach, Lucas, the Elder	Frau Reuss.
Lorenzo di Credi (?)	Portrait of a Young Lady.
Master of the Darmstadt Passion Middle Rhenish	The Madonna Enthroned.
Master of the Darmstadt Passion Middle Rhenish	Adoration of the Magi.
Master of the Darmstadt Passion Middle Rhenish	The Holy Trinity.
Master of the Darmstadt Passion Middle Rhenish	Story of the Cross.
Domenico Veneziano	Martyrdom of Saint Lucy.
Domenico Veneziano (?)	Adoration of the Magi.
Domenico Veneziano (?)	Portrait of a Young Lady.
Durer, Albrecht	Hieronymus Holzschuher.
Durer, Albrecht	Madonna in Prayer.
Durer, Albrecht	Madonna With the Siskin.
Durer, Albrecht	Portrait of a Young Woman.
Elsheimer, Adam	Landscape With Penitent Magdalen.
Elsheimer, Adam	The Holy Family with Angels.
Elsheimer, Adam (?)	Noah's Thank Offering.
Elsheimer, Adam (?)	Saint Christopher.
Eyck, Jan van	Giovanni Arnolfini.
Eyck, Jan van	Madonna and Child in a Church.
Eyck, Jan van	Christ Crucified.
Eyck, Jan van	The Man With the Pink.

Artist	*Title*
Eyck, Jan van	Baldwin Delannoy, Knight of the Golden Fleece.
Robert Campin, Master of Flemalle	The Crucifixion.
Robert Campin, Master of Flemalle	Portrait of a Man.
Fouquet, Jean	Etienne Chevalier and Saint Stephen.
French c. 1400	Coronation of Mary.
French c. 1400	Diptych: Christ on the Cross. The Man of Sorrows.
Geertgen Tot Sint Jans	John the Baptist in the Wilderness.
Geertgen Tot Sint Jans	Madonna and Child.
Giorgione	Portrait of a Young Man.
Giotto di Bondone	Death of Mary.
Giovanni di Paolo	The Crucifixion.
Giovanni di Paolo	Admission of Saint Clara to a Cloister.
Giovanni di Paolo	Saint Clara Aids the Shipwrecked.
Gossaert Jan (Mabuse)	Christ in the Garden of Gethsemane.
Gossaert Jan (Mabuse)	Baudouin de Bourbon.
Guardi, Francesco	Balloon Ascension on the Giudecca.
Guardi, Francesco	The Piazzetta in Venice.
Guardi, Francesco	Plaza San Marco, Venice.
Hals, Frans	Portrait of a Young Man.
Hals, Frans	Portrait of a Young Woman.
Hals, Frans	Singing Boy With a Flute.
Hals, Frans	Tyman Oosdorp.
Hals, Frans	The Witch of Haarlem, Malle Bobbe.
Hals, Frans	The Child-Nurse and Her Charge.
Hobbema, Meindert	A Road Winding Amongst Clumps of Trees and Small Farms.
Holbein, Hans, the Younger	Portrait of an Elderly Man.
Holbein, Hans, the Younger	George Gisze.
Holbein, Hans, the Younger	Hermann Hillebrandt Wedigh.
Hooch, Pieter de (?)	The Bugler.
Hooch, Pieter de	The Mother.
Kalf, Willem	Still Life.
Kalf, Willem	Still Life.
Koninck, Philips	Panorama of Holland.
La Tour, Georges de	Saint Sebastian Mourned by Saint Irene and Her Ladies.
Leyden, Lucas van	The Chess Players.
Leyden, Lucas van	Madonna and Child with Angels.
Lippi, Filippino	Allegory of Music.
Lippi, Fra Filippo	The Madonna Adoring the Christ Child.
Lorenzetti, Pietro	Saint Humilitas Heals a Sick Nun.
Lorenzetti, Pietro	Death of Saint Humilitas.
Lorrain, Claude (Gellee)	Italian Coastal Landscape in Early Morning Light.
Lotto, Lorenzo	Jesus Takes Leave of His Mother.
Mainardi, Sebastiano	Portrait of a Young Man With a Red Cap.
Mantegna, Andrea	Cardinal Lodovico Mezzarota.
Mantegna, Andrea	Presentation in the Temple.
Marmion, Simon	Altar of Saint Omer Life of Saint Bertin.

Artist	*Title*
Marmion, Simon	Altar of Saint Omer Life of Saint Bertin.
Martini, Simone	The Burial of Christ.
Masaccio	Adoration of the Magi.
Masaccio	Martyrdom of Saint Peter.
	Martyrdom of Saint John, Baptist.
Masaccio	Saint Julian Slays His Parents.
	Saint Nicolas Endows Three Maidens.
Masaccio	The Four Saints Predella.
	An Elderly Carmelite.
Masaccio	The Four Saints Predella.
	Saint Augustine.
Masaccio	The Four Saints Predella.
	Saint Jerome.
Masaccio	The Four Saints Predella.
	A Young Carmelite.
Masaccio	Felicitations at the Birth of a Florentine of Patrician Family.
Memling, Hans	Madonna and Child.
Memling, Hans	Madonna and Child.
Memling, Hans	Madonna and Child.
Memmi, Lippo	Madonna and Child.
Metsys, Quentin	The Mourning Magdalen.
Mostaert, Jan	Portrait of a Man.
Ouwater, Aelbert van	Resurrection of Lazarus.
Palma Vecchio	Portrait of a Man.
Palma Vecchio	A Young Woman.
Panini, Giovanni Paolo	Composite View of the Ruins of Rome.
Patinir, Joachim	Rest on the Flight Into Egypt.
Piero di Cosimo	Venus, Mars and Amor.
Pollaiuolo, Antonio	David With the Head of Goliath.
Poussin, Nicolas	The Roman Campagna With Saint Matthew and the Angel.
Poussin, Nicolas	Jupiter Nourished by the Goat, Amalthea.
Raphael	Madonna and Child.
Raphael	Madonna and Child With the Little Saint John.
Raphael	Madonna and Child With the Little Saint John.
Rembrandt	Daniel's Vision.
Rembrandt	Hendrikje Stoffels.
Rembrandt	Landscape With a Bridge.
Rembrandt	The Man With the Golden Helmet.
Rembrandt	Moses Breaking the Tablets of the Law.
Rembrandt	Old Man With the Red Cap.
Rembrandt	Minerva.
Rembrandt	Potiphar's Wife Accuses Joseph.
Rembrandt	The Preaching of John the Baptist.
Rembrandt	Proserpine.
Rembrandt	A Rabbi.
Rembrandt	Saskia.
Rembrandt	Self Portrait.

Artist	*Title*
Rembrandt	Susanna and the Elders.
Rembrandt	Tobias and the Angel.
Rubens, Peter Paul	Andromeda.
Rubens, Peter Paul	Isabella Brandt.
Rubens, Peter Paul	Landscape With the Shipwreck of Aeneas.
Rubens, Peter Paul	Madonna and Child Enthroned With Saints.
Rubens, Peter Paul	Perseus Frees Andromeda.
Rubens, Peter Paul	Saint Cecilia.
Ruisdael, Jacob van	Haarlem From the Dunes at Overveen.
Sacchi, Andrea (?)	Alessandro del Borro.
Sassetta	Episode From the Legend of Saint Francis.
Sassetta	The Mass of Saint Francis.
Schongauer, Martin	The Nativity.
Piombo, Sebastiano del (?)	A Nobleman in the Costume of a Knight of Saint James.
Piombo, Sebastiano del	Portrait of a Young Lady of Rome.
Seghers, Hercules	View of Rhenen.
Signorelli, Luca	Portrait of an Elderly Man.
Signorelli, Luca	Saint Catherine of Siena, the Magdalen, and Saint Jerome.
Signorelli, Luca	Saints Augustine, Anthony of Padua, Catherine of Alexandria.
Squarcione, Francesco	Madonna and Child.
Steen, Jan	Baptismal Party.
Steen, Jan	The Garden of the Inn.
Strozzi, Bernardo	Judith With the Head of Holofernes.
Ter Borch, Gerard	The Concert.
Ter Borch, Gerard	Fatherly Advice.
Tiepolo, Giovanni Battista	Martyrdom of Saint Agatha.
Tiepolo, Giovanni Battista	Rinaldo in Armida's Enchanted Garden.
Tiepolo, Giovanni Battista	Via Crucis.
Tintoretto, Jacopo	Doge Mocenigo.
Tintoretto, Jacopo	Portrait of a Man With a Long White Beard.
Titian	A Daughter of Roberto Strozzi.
Titian	Portrait of a Young Man.
Titian	Self Portrait.
Titian	Titian's Daughter, Lavinia.
Titian	Venus With the Organ Player.
Tura, Cosimo	Saint Christopher.
Tura, Cosimo	Saint Sebastian.
Velazquez de Silva, Diego	Countess Olivares.
Velde, Adriaen van de	The Farm.
Vermeer, Jan	The Pearl Necklace.
Vermeer, Jan	The Taste of Wine.
Verrocchio, Andrea del	Madonna and Child.
Verrocchio, Andrea del	Madonna and Child.
Master of the Virgo Inter Virgines	Adoration of the Magi.
Watteau, Antoine	The French Comedians.

Artist	*Title*
Watteau, Antoine	The Italian Comedians.
Watteau, Antoine	Outdoor Festival.
Westphalian c. 1250–1270	Altarpiece: The Trinity With Mary and Saint John.
Weyden, Rogier van der	Charles the Bold, Duke of Burgundy.
Weyden, Rogier van der	The Nativity.
Weyden, Rogier van der	Augustus and the Tiburtine Sibyl.
Weyden, Rogier van der	The Magi.
Weyden, Rogier van der	The Saint John Altar. The Life of Saint John.
Weyden, Rogier van der (School of)	Joys and Sorrows of Mary.
Weyden, Rogier van der	Portrait of a Young Woman.
Witz, Konrad	The Decision on the Redemption of Man.
Witz, Konrad	The Crucifixion.
Daumier, Honore	Don Quixote.
Manet, Edouard	The Greenhouse.

ACQUISITIONS

PURCHASE OF PAINTING

On February 11, 1946, the Board of Trustees approved the purchase of the painting, "Siegfried and the Rhine Maidens," by Albert P. Ryder, with funds of the Gallery.

GIFTS OF PAINTING AND SCULPTURE

On October 10, 1945, the Board of Trustees accepted the painting, "Lady with a Harp—(Eliza Ridgely)," by Thomas Sully, from Mrs. Maude Monell Vetlesen. The Board of Trustees on December 7, 1945, accepted the portrait of Aaron Baldwin, by Francis Alexander, from Mrs. Earle E. Bessey, the paintings, "The Johnstone Group," by Sir Henry Raeburn, "Soap Bubbles" and "The Magic Lantern," by Charles-Amedee-Philippe van Loo, from Mrs. Florence S. Schuette, the portrait of Governor Charles Ridgely, by Thomas Sully, from Mr. and Mrs. John Ridgely of Hampton, and the paintings, "A Courtyard, Doge's Palace, with the Procession of the Papal Legate," "A Fete Day, Venice," "The Square of St. Mark's," and "Venice, The Quay of the Piazzetta," by Canaletto, from Mrs. Barbara Hutton. On December 19, 1945, the Board of Trustees accepted the bronze portrait bust, Imaginary Portrait after a Late Roman Bust, by Lodovico Lombardi, from Mr. Stanley Mortimer. On May 10, 1946, the Board of Trustees accepted the portrait of Count Ludovico Vidmano, by Tiberio Tinelli, from Samuel L. Fuller, and on the same date the Board also accepted two bronzes and about half a dozen selected small paintings from George Matthew Adams.

GIFTS OF DECORATIVE ARTS

On December 7, 1945, the Board of Trustees accepted two miniature paintings on porcelain, Louis de Bourbon, Prince de Conde (Le Grand Conde), and Henri Jules, Duc d'Albret (later Prince de Conde), by Jean Petitot, the Elder, from Lessing J. Rosenwald.

GIFTS OF PRINTS AND DRAWINGS

The Board of Trustees, on July 26, 1945, accepted a set of elephant folio of John James Audubon's Birds of America, consisting of 435 unbound plates, a set of five volumes of text pertaining to those plates, and miscellaneous letters, clippings, and other papers relating to the plates, from Mrs. Walter B. James. On December 7, 1945, the Board accepted an engraving, "George Town and Federal City or City of Washington," from Otis T. Bradley. On May 10, 1946, the Board accepted a lithograph, "In Memory of the Children of Europe Who Have To Die of Cold and Hunger This Xmas," by Oscar Kokoschka, from Oscar Kokoschka, 17 lithographs from the United States Army Forces, Middle Pacific, a collection of prints, drawings, and etchings by Legros from George Matthew Adams, and a print "L'Heureuse Fecondite," designed by Fragonard and engraved by Nicolas de Launay, from Edwin Wolf, II.

LOAN OF WORKS OF ART TO THE GALLERY

During the fiscal year 1946 the following works of art were received on loan:

Particulars	*Artist*
From Clarence Y. Palitz, New York, N. Y.:	
The Nymph of the Spring	Lucas Cranach the Elder.
From William A. Coolidge, Washington, D. C.:	
View of San Giorgio and the Dogana from the Piazza di San Marco	Canaletto.
Le Laboureur	Vincent van Gogh.
River View at St. Mammes	Alfred Sisley.
Landscape on Isle of Wight	Joseph Mallord William Turner.
From Mrs. Arthur Iselin and William Jay Iselin, Katonah, N. Y.:	
Chief Justice John Jay	Gilbert Stuart.
Alexander Hamilton	John Trumbull.
From Mrs. Dwight Davis, Washington, D. C.:	
Captain Patrick Miller	Sir Henry Raeburn.
From the Army Institute of Pathology, Washington, D. C.:	
Dr. John H. Brinton	Thomas Eakins.
From Samuel H. Kress and the Samuel H. Kress Foundation, New York, N. Y.:	
86 paintings and 12 pieces of sculpture.	

Particulars	*Artist*
From Madame Charlotte Fuerstenberg, Johannesburg, Africa:	
12 French paintings.	
From James Hazen Hyde, New York, N. Y.:	
Large Brussels tapestry	Signed "A. Auwercx."
From Colonel Axel H. Oxholm, Washington, D. C.:	
Martha Washington	Attributed to Ralph Earl.
From Frederick Sturges, Jr., New York, N. Y.:	
Newport Harbor, 1857	John S. Kensett.

LOAN OF WORKS OF ART BY THE GALLERY

During the fiscal year 1946 the Gallery loaned the following works of art for exhibition purposes:

Particulars	*Artist*
To the George Walter Vincent Smith Art Gallery, Springfield, Mass.:	
The Lackawanna Valley	George Inness.
To the Art Institute of Chicago, Chicago, Ill.:	
Both Members of This Club	George Bellows.
To the Century Association, New York, N. Y.:	
Portrait of Nathaniel Hawthorne	Emanuel Leutze.
Both Members of This Club	George Bellows.
To the Tate Gallery, London, England:	
Breezing Up	Winslow Homer.
George Washington	Gilbert Stuart.
Mrs. Richard Yates	Gilbert Stuart.
The Lackawanna Valley	George Inness.
Siegfried and the Rhine Maidens	Albert P. Ryder.
A Friendly Call	William Merritt Chase.
Governor Charles Ridgely	Thomas Sully.
To the White House, Washington, D. C.:	
Portrait of George Washington	Rembrandt Peale.
To the U. S. Department of State, Blair Lee House, Washington, D. C.:	
7 prints from the Rosenwald Collection.	

EXHIBITIONS

The following exhibitions were held at the National Gallery of Art during the fiscal year ended June 30, 1946:

Soldier art. Winning entries in the National Army Arts Contest, sponsored and financed by the Special Services Division, United States Army Service Forces, from July 4 to September 4, 1945.

Currier and Ives prints. Lent by Harry T. Peters, from July 22 to November 25, 1945.

New acquisitions in the Rosenwald Collection. A selection of prints from the new acquisitions in the Rosenwald Collection, from September 9 to November 4, 1945.

Marine Corps battle art. Paintings and sketches made on Pacific battlefields, from Guadalcanal to Okinawa; sponsored and financed by the United States Marine Corps, marking the one hundred and seventieth anniversary of the founding of the Corps, from November 10 to December 16, 1945.

Prints. Selections from the National Gallery's collection of prints and drawings, from November 27, 1945, to March 6, 1946.

Kress additions to the National Gallery of Art. Paintings and sculpture lent to the Kress Collection of the National Gallery of Art by Samuel H. Kress and the Samuel H. Kress Foundation, opening February 2, 1946.

Medicine in prints. A collection formed by Dr. Clements C. Fry of the Department of Health, Yale University, from February 10 to March 24, 1946.

Hogarth and Rowlandson prints. From the Lessing J. Rosenwald Collection, from February 17 to May 19, 1946.

Facsimiles of Russian folk prints. From the Rosenwald Collection, from March 7 to May 13, 1946.

Life of Christ as depicted in the etchings of Rembrandt. Prints from the Rosenwald Collection and an anonymous lender, from May 14, 1946, to continue approximately 2 months.

Audubon prints, "Birds of America." Elephant folio set by John James Audubon, from May 26, 1946, to continue approximately 2 months.

Fine arts under fire. Photographs in 30 panels showing the work of the Monuments and Fine Arts Officers in Europe, from May 14 to June 2, 1946.

I Remember That. Interiors of a generation ago, from a selection of water colors from the Index of American Design, from June 4 to June 16, 1946.

Music in prints. Prints from the Rosenwald Collection, from June 18, 1946, to continue for an indefinite period.

TRAVELING EXHIBITIONS

Index of American Design. Exhibitions from this collection of water colors, drawings, etc., have been shown during the fiscal year 1946 at the following places: University of New Hampshire, Durham, N. H.; Elgin Art Academy Gallery, Elgin, Ill.; Baltimore Museum of Art, Baltimore, Md.; University of Wisconsin, Madison, Wis.; Beauvoir National Cathedral Elementary School, Washington, D. C.; Kanawha County Public Library, Charleston, W. Va.; Society of Liberal Arts, Joslyn Memorial, Omaha, Nebr.; California Palace of the Legion of Honor, San Francisco, Calif.; the Newark Museum, Newark, N. J.; Library of Congress, Washington, D. C.; Ohio State Museum, Columbus, Ohio; American Federation of Arts, Washington, D. C. (for circulation); Antiquarium League of Rochester, N. Y.; American Embassy, Madrid, Spain; and George Washington University, Washington, D. C.

Rosenwald prints. Special exhibitions of prints from the Rosenwald Collection were circulated during the fiscal year 1946 to the following places: Philadelphia Museum of Art, Philadelphia, Pa.; Free Library of Philadelphia, Philadelphia, Pa.; Philadelphia Art Alliance, Philadelphia, Pa.; American British Art Center, New York, N. Y.; Library of Congress, Washington, D. C.; Cayuga Museum of

Art and History, Auburn, N. Y.; Smith College Museum of Art, Northampton, Mass.; and the Inter-American Office of the National Gallery of Art, Washington, D. C., for circulation in South America. Five special exhibitions were held at Alverthorpe Gallery, Jenkintown, Pa., for the Tyler School of Art.

VARIOUS GALLERY ACTIVITIES

During the period from July 1, 1945, through June 30, 1946, a total of 52 Sunday evening concerts were given in the East Garden Court of the Gallery. The concerts were free to the public and were attended by over 50,000 persons. During March 1946, the Third American Music Festival was held and attracted national as well as local interest.

Special suppers for service men and women were held every Sunday night, during the war years, in the staff dining room of the National Gallery of Art. Approximately 7,280 service men and women, many of them in the service of our allies, attended. These suppers, free to the guests, were made possible by generous contributions received from friends and the staff of the National Gallery of Art.

Four additional prints of the 16-mm. sound version of the film, "National Gallery of Art," were acquired, making a total of six prints now owned by the Gallery. Of these, one is now on indefinite loan at the American Embassy in Paris, and a second one was taken by Mr. Walker, Chief Curator of the Gallery, for showing abroad. Prints of the film were borrowed by 13 institutions and individuals for showing.

A total of 136 color reproductions of works of art in the National Gallery have been assembled, labeled, and framed. These reproductions, arranged in sets according to schools, were purchased by the General Federation of Women's Clubs for circulation among its clubs in this country.

A total of 3,235 copies of press releases, 177 special permits to copy paintings in the Gallery, and 86 special permits to photograph in the Gallery were issued.

INDEX OF AMERICAN DESIGN

On July 1, 1945, a new section, staffed by a supervisor and two assistants, was organized to carry out all work connected with the Index of American Design. During the year, the 22,000 drawings were classified and filed. Plans were formulated for lending Index drawings, and in this connection, working contacts have been established with many private individuals, art museums, historical societies, etc. About 20 exhibitions of selected drawings were assembled and circulated. A total of 160 original designs and 66 photographs were selected for

use in connection with publications, and 130 photographs were distributed to artists, manufacturers, research students, etc.

INTER-AMERICAN OFFICE

During the year ended June 30, 1946, the Inter-American Office has continued to carry out the Latin American art program of the Department of State through the exchange of material and publications and the assembling of information on Inter-American art activities. During this time six major photographic exhibitions and two exhibitions of original art were prepared for circulation in Latin America; approximately 300 publications were widely distributed throughout the Latin American countries and a booklet listing Traveling Exhibitions of Latin American Art in the United States was compiled, published, and distributed in this country.

CURATORIAL DEPARTMENT

During the past year there were 789 new accessions, either gifts, loans, or deposits, including paintings, sculpture, prints, and the decorative arts. These accessions were registered and the great majority placed on exhibition. Three hundred and seventy works of art were brought to the Gallery for expert opinion, involving 208 consultations. The curatorial staff also made 103 written and 154 verbal replies to questions from the public requiring research, and 23 visits were made to collections of private individuals in connection with offers to the Gallery of gifts or loans. Five members of the staff delivered 21 public lectures on 11 topics.

Work on the revision of the original preliminary catalog, published in 1941, has made considerable progress, and the first portion of the new sculpture catalog, covering Medieval and Renaissance marbles and terra cottas, was completed. At the same time, the cataloging and filing of photographs in the Richter Archive continued, and will be completed within the next year; this will make possible the cataloging and filing of new accessions of photographs without delay as soon as they are received. For the publications of the curatorial staff during the year, see under Publications in this report.

Other important activities of the curatorial staff included the Tate Gallery Exhibition in London, England, which consisted of an exhibition of 220 American paintings, chosen from American museums and private collections for showing in London at the Tate Gallery in June and July. In addition to general organizing responsibilities, Mr. Walker, Chief Curator of the Gallery, was chairman of the committee to select eighteenth- and nineteenth-century paintings.

The curatorial staff continued its assistance to the American Commission for the Protection and Salvage of Artistic and Historic Monuments in War Areas (Justice Owen J. Roberts, Chairman) to the end of the Commission's activity on June 30, 1946.

Although the custodianship of the French Government collection of works of art was terminated February 1, 1945, a number of paintings continued to be housed and exhibited in the National Gallery of Art. At the end of the past fiscal year preparations were begun to remove all but six of those paintings for packing and shipment to France.

RESTORATION AND REPAIR OF WORKS OF ART

With the authorization of the Board and the approval of the Chief Curator, the necessary restoration and repair of works of art in the Gallery's collection were made by Stephen S. Pichetto, Consultant Restorer to the Gallery. All work was completed in the restorer's studio in the Gallery, with the exception of 39 paintings requiring attention before they could be shipped to Washington or on which work had already been begun in Mr. Pichetto's New York studio.

EDUCATIONAL PROGRAM

Approximately 15,000 persons attended the Gallery tours of the collection, and 13,030 attended the lectures in the auditorium by staff and visiting lecturers. The Picture of the Week, a 10-minute, twice-daily talk on a single painting, continued to be a most popular feature, attracting 25,029 persons during the year. Special tours, conferences, and appointments were arranged for 2,599 persons.

LIBRARY

A total of 802 books, 160 pamphlets, and 98 periodicals were presented to the Gallery; 7 books were purchased by the Gallery; 135 photographs and 196 kodachrome slides were presented as gifts; 35 books, 43 pamphlets, and 443 bulletins were received on exchange from other institutions; and 26 subscriptions to periodicals were made; 3,589 books were borrowed and returned, of which number 3,504 were from the Library of Congress and the remaining 85 from art museum and university libraries.

PHOTOGRAPHIC DEPARTMENT

During the year the photographic laboratory of the Gallery made 13,195 prints, 669 black-and-white slides, and 2,026 color slides, in addition to 821 negatives, and 178 X-rays, infrared photographs,

ultraviolet photographs, kodachromes, and sets of color-separation negatives.

OTHER GIFTS

During the fiscal year ended June 30, 1946, gifts of books on art and related material were made to the Gallery by Paul Mellon, Mrs. W. C. Eustis, the Victoria and Albert Museum, Donald D. Shepard, the Dumbarton Oaks Library, the Exchange and Gift Division of the Library of Congress, the educational department of the Young Women's Christian Association, Wells M. Sawyer, and Leander McCormick-Goodhart. Gifts of money during the fiscal year 1946 were received from Mrs. Florence Becker, David E. Finley, Macgill James, Paul Mellon, Duncan Phillips, Lessing J. Rosenwald, and The A. W. Mellon Educational and Charitable Trust.

AUDIT OF PRIVATE FUNDS OF THE GALLERY

An audit is being made of the private funds of the Gallery for the fiscal year ended June 30, 1946, by Price, Waterhouse & Co., public accountants, and the certificate of that company on its examination of the accounting records maintained for such funds will be submitted to the Gallery.

Respectfully submitted.

HUNTINGTON CAIRNS, *Secretary.*

DR. ALEXANDER WETMORE,
Secretary, Smithsonian Institution.

APPENDIX 3

REPORT ON THE NATIONAL COLLECTION OF FINE ARTS

SIR: I have the honor to submit the following report on the activities of the National Collection of Fine Arts for the fiscal year ended June 30, 1946:

APPROPRIATIONS

For the administration of the National Collection of Fine Arts by the Smithsonian Institution, including compensation of necessary employees, purchase of books of reference and periodicals, traveling expenses, and other necessary incidental expenses, $14,550 was allotted, of which $5,018.19 was expended in connection with the care and maintenance of the Freer Gallery of Art, a unit of the National Collection of Fine Arts. The balance was spent for the care and upkeep of the National Collection of Fine Arts, nearly all of this sum being required for the payment of salaries, traveling expenses, purchase of books and periodicals, and necessary disbursements for the care of the collection.

THE SMITHSONIAN ART COMMISSION

The twenty-third annual meeting of the Smithsonian Art Commission was held on December 4, 1945. The members assembled in Gallery 3 of the National Collection of Fine Arts, in the Natural History Building, at 10:30 a. m., where, as the advisory committee on the acceptance of works of art which had been submitted during the year, they accepted the following:

Oil painting, The Woodland Way, by William Baxter Closson (1848–1926). Gift of the executors of Mrs. Closson's estate.

Oil painting, Portrait of George Catlin, by William Fisk, R. A. (1796–1872). Gift of Miss May C. Kinney, Ernest C. Kinney, and Bradford Wickes.

Miniature, Miss Clementine Dalcour in Mourning, by A. Margaretta Archambault. Gift of the artist.

Miniature, Woman Knitting, by Mary Ursula Whitlock (1860–1944). Gift of the executors of the artist's estate. Accepted for the Smithsonian Institution.

The members then adjourned to the offices of Dr. Wetmore, Secretary of the Institution, for the further proceedings, and the meeting was called to order by the chairman, Mr. Manship.

The members present were: Paul Manship, chairman; Dr. Alexander Wetmore (ex officio); and Robert W. Bliss, John N. Brown, George

H. Edgell, David E. Finley, George H. Myers, Archibald G. Wenley, and Mahonri M. Young. Ruel P. Tolman, Curator of the Division of Graphic Arts in the United States National Museum and Acting Director of the National Collection of Fine Arts, also attended.

The following resolutions on the death of Herbert Adams were submitted and adopted:

Whereas, the Smithsonian Art Commission has learned of the death on May 21, 1945, of Mr. Herbert Adams, a member of the Commission since 1921; therefore be it

Resolved, That the Commission desires here to record its sincere sorrow at the passing of Mr. Adams, an eminent sculptor, whose productions are an enduring monument to his genius. He was ever ready with helpful advice in formulating the policies of the Smithsonian Art Commission and the National Collection of Fine Arts. His helpful interest in the affairs of the Commission will be sadly missed.

Resolved, That these resolutions be spread upon the records of the commission, and that the secretary be requested to inform the family of Mr. Adams of this action.

The resignation of Edward W. Redfield was submitted and accepted with regret. A letter of appreciation for his long and faithful service was ordered sent to him.

The commission recommended to the Board of Regents the name of John Taylor Arms to succeed Mr. Adams, and Eugene E. Speicher to succeed Mr. Redfield.

The following officers were elected for the ensuing year: Paul Manship, chairman; Frank Jewett Mather, Jr., vice chairman, and Dr. Alexander Wetmore, secretary.

The commission recommended to the Board of Regents the reelection of John Nicholas Brown, Mahonri M. Young, George Hewitt Myers, and Robert Woods Bliss for the usual 4-year period.

The following were elected members of the executive committee for the ensuing year: David E. Finley, chairman; Robert Woods Bliss, and Gilmore D. Clark. Paul Manship, as chairman of the Commission, and Dr. Alexander Wetmore, as secretary of the Commission, are ex officio members of the executive committee.

THE CATHERINE WALDEN MYER FUND

Two miniatures, water color on ivory, were acquired from the fund established through the bequest of the late Catherine Walden Myer, as follows:

53. Charles Wm. McGinnes (1793–), by Carl Weinedel (1795–1845); from Mrs. Robert L. Jones, Richland, Wash.

54. Samuel Douchy, by Nathaniel Rogers (1788–1844); from Mrs. Frederic Fairchild Sherman, Millington, N. J.

THE REV. ALFRED DUANE PELL FUND

The following two pieces of pottery were acquired from the fund established through the bequest of the late Rev. Alfred Duane Pell, as follows:

One vase, Mountains of the Moon, designed and executed by Lea Halpern, of Holland; from Miss Halpern.

One stoneware bottle, designed and executed by Bernard Leach, of England; from the British Crafts Exhibition.

LOANS ACCEPTED

A marine painting by Lionel Walden (1861–1933), was lent by Admiral Chester W. Nimitz on December 11, and withdrawn on December 21, 1945.

Three miniatures, water color on ivory, Dr. John Austin, of British Guiana, attributed to Alexander Robertson (1772–1841); Jonathan Amory (1802–1885) of Boston, by unknown artist, and Mrs. Jonathan Amory (1806/09–1875), (daughter of Dr. John Austin), by Mme. Busset, were lent by Miss E. M. Matthews of Chevy Chase, Md., on February 14, 1946.

WITHDRAWALS BY OWNERS

A marble bust of Mrs. William C. Preston, by Hiram Powers, lent by James Q. Davis in 1926, was withdrawn by the owner and sent to the University of South Carolina on July 3, 1945.

Three portraits, by Charles Willson Peale, of Mrs. Elliott, Mrs. John O'Donnell, and Mary O'Donnell, and one by Charles Peale Polk of George Washington, lent in 1917, were withdrawn by the owner, Miss Mary Eugenia Parke, on December 17, 1945.

Two pastels, The Cliffs Aflame, and Patsy, and five oil paintings, Looking Far Out, Joyous Childhood, The Red Barn, Peonies, and Springtime, by William B. Closson, lent in 1940, were withdrawn by the executors of Mrs. Closson's estate on February 21, 1946.

A silver tankard, lent by Ensign Edward Shippen, United States Naval Reserve, in 1944, was withdrawn by the owner on April 5, 1946.

DEPOSITS

Three bronzes which had been in the art room of the Smithsonian Institution for many years, two entitled Augustus Caesar, and the other, Centaur, by unknown sculptors, were deposited by the Smithsonian Institution.

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LOANS TO OTHER MUSEUMS AND ORGANIZATIONS

Two oil paintings, Portrait of Commodore Stephen Decatur, by Gilbert Stuart, and Portrait of Admiral William S. Sims, by Irving R. Wiles, were lent to the United States Naval Academy for an exhibition of naval personages and traditions, in connection with the ceremonies held in observing the centennial anniversary of the founding of the United States Naval Academy at Annapolis, on October 10, 1945, held at M. Knoedler & Co., New York City, September 24 through October 13, 1945. (Returned November 6, 1945.)

Two miniatures, Mrs. Bertha E. Jaques, by Nelly McKenzie Tolman, and Woman Knitting, by Mary Ursula Whitlock, were lent to the Pennsylvania Society of Miniature Painters to be included in their annual exhibition in Philadelphia and Washington. (Returned December 3, 1945.)

An oil painting, The Visit of the Mistress, by Winslow Homer, was lent to the Virginia Museum of Fine Arts, Richmond, Va., to be included in their exhibition of Nineteenth Century Virginia Genre Painting, January 17 through February 13, 1946. (Returned February 25, 1946.)

The original design for the painting in the Capitol, Westward the Course of Empire Takes Its Way, by Emanuel Leutze, was lent to The Century Association for an exhibition held at their club, New York City, February 7 through March 3, 1946. (Returned March 7, 1946.)

Four water colors by William H. Holmes, A Maryland Meadow, Watt's Branch, Near Rockville, A Storm-Beaten Coast, The Unmodified Rock Creek About 1910, and Coal Barge, Capri, 1880, were lent to The White House, January 25, 1946.

Three oil paintings, Conway Hills, by Frederick Ballard Williams, The Meadow Brook, by Charles P. Gruppe, and Sea and Rain, by George H. Bogert, were lent to the Treasury Department, March 14, 1946, to be hung in the large conference room in the Treasury Building.

Two pastel portraits of Gen. George Washington and Mrs. Martha Washington, by James Sharples, were lent, with the consent of the owners, Mrs. Robert E. Lee, Dr. George Bolling Lee, Mrs. Hanson E. Ely, Jr., and Mrs. William Hunter de Butts, to Knoedler Galleries, New York City, to be included in an exhibition sponsored by the Robert E. Lee Memorial Foundation called "Stratford Hall, the Lees of Virginia, and Their Contemporaries," from April 30 to May 18, 1946. (Returned May 27, 1946.)

LOANS RETURNED

One oil painting, Portrait of Andrew Jackson, by R. E. W. Earle, lent to the Baltimore Museum of Art, was returned July 21, 1945.

Two oil paintings, The Woodland Way, and Joyous Childhood, by William Baxter Closson, lent to the civilian medical division, War Department, were returned November 21, 1945.

THE HENRY WARD RANGER FUND

No. 115. Wreck at Lobster Cove, by Andrew Winter, N. A. (1893–), purchased in 1940 by the council of the National Academy of Design from the fund provided by the Henry Ward Ranger bequest, was assigned by the council to the Winchester Public Library, Winchester, Mass., December 7, 1945.

The following two paintings were recalled for action on the part of the Smithsonian Art Commission, in accordance with the provision in the Ranger bequest. The Smithsonian Art Commission decided not to accept the paintings and they were returned to the museums to which they were originally assigned:

No. 61. Woodland Nymph, by Douglas Volk, N. A. (1856–1935), assigned to the Atlanta Art Association and High Museum of Art, May 16, 1927.

No. 67. A Long Island Garden, by Childe Hassam, N. A. (1859–1935), assigned to the Kansas City Art Institute, February 27, 1929.

THE NATIONAL COLLECTION OF FINE ARTS REFERENCE LIBRARY

A total of 414 publications (277 volumes and 137 pamphlets) were accessioned. This number includes 152 volumes and 36 pamphlets purchased, the priced auction catalogs of the Parke–Bernet Galleries accounting for 33 volumes and 30 pamphlets. The other accessions were publications received by exchange, gift, or transfer, with the exception of 72 volumes of periodicals which were returned from the bindery. This year's additions brought the total library accessions to 10,134.

SPECIAL EXHIBITIONS

July 3 through October 9, 1945.—An oil painting, John Barrymore as Hamlet, by John Slavin, of Richmond, Va., was shown in Gallery 2.

October 3 through 28, 1945.—The Hon. William D. Pawley collection of 27 portraits of "Flying Tigers," by Raymond P. R. Neilson, N. A., was sponsored by the Chinese Ambassador to the United States, Dr. Wei Tao-Ming. Catalog was privately printed.

October 7 through 28, 1945.—Exhibition of sculptures by Genaro Amador Lira, of Nicaragua, consisting of 11 large pieces, 16 miniature figures carved in wood and ivory and 1 cast in silver, was sponsored by the Pan American Union. A catalog was published by the Pan American Union.

October 8 through 28, 1945.—Twenty portraits of members of the Lafayette Escadrille, and a few other Americans who fought in

World War I, by John Elliott (1858–1925), from our permanent collection.

November 2 through 28, 1945.—The Eighth Metropolitan State Art Contest, held under the auspices of the District of Columbia Chapter, American Artist's Professional League, assisted by the Entre Nous Club. There were 412 exhibits, consisting of paintings, sculpture, prints, and metalcraft.

December 9, 1945, through January 6, 1946.—The forty-fourth annual exhibition of miniatures by the Pennsylvania Society of Miniature Painters, consisting of 100 miniatures. Reprint of catalog.

January 8 through 27, 1946.—Exhibition of 53 portraits by Alfred Jonniaux was held under the patronage of His Excellency, Baron Robert Silvercruys, Belgian Ambassador to the United States. A catalog was published by the artist.

February 1 through 24, 1946.—A Century of the Greeting Card (1846–1946), courtesy of Brownie's Blockprints, Inc., of New York, creators of the Brownie Greeting Cards. There were 136 panels containing 949 cards. A catalog was privately published.

March 1 through 31, 1946.—Exhibition of 53 oil and water-color paintings, by Charles P. Gruppe (1860–1940).

April 5 through 28, 1946.—Exhibition of 54 paintings of Siam by students of the School of Arts and Crafts, Bangkok, held under the auspices of the Royal Siamese Legation.

May 12 through 29, 1946.—Biennial Exhibition of National League of American Pen Women, including 582 art objects.

June 7 through 16, 1946.—Scholastic Calendar Art Competition, sponsored by the Washington Post, including 150 paintings.

Respectfully submitted.

R. P. Tolman, *Acting Director.*

Dr. A. Wetmore,
Secretary, Smithsonian Institution.

APPENDIX 4

REPORT ON THE FREER GALLERY OF ART

SIR: I have the honor to submit the twenty-sixth annual report on the Freer Gallery of Art for the year ended June 30, 1946.

THE COLLECTIONS

Additions to the collections by purchase were as follows:

BRONZE

46.2. Chinese, Han dynasty (206 B. C.–A. D. 220). Gilt bronze cup with plum-colored lacquer overbody, handle in form of a bird's head with jewel eyes and turquoise crest. 0.041 x 0.100 x 0.096.

46.4. Chinese, Chou dynasty (1122–256 B. C.). Ceremonial vessel of the type *ting*, smooth bluish-green patina, occasional encrustrations of cuprite; two upright inverted U-shaped handles on rim, band of decoration cast in relief around rim; three-character inscription inside. 0.156 x 0.151.

46.5. Chinese, Shang dynasty (1766–1122 B. C.). Weapon (ax) of the type *ch'i;* green to gray patina with patches of azurite and cuprite; hole with thickened rim through upper center of blade, decoration cast in relief on *nei; nei* and back of blade pierced for hafting; inscription of one character. 0.327 x 0.251; weight: 6-¾ pounds. (Illustrated.)

46.8. Chinese, Han dynasty (206 B. C.–A. D. 220). Gilt bronze garment hook in dragon form; back inlaid with 10 pieces of grayish-white to greenish jade; broad piece of jade at back incised with mask pattern. 0.199 x 0.021.

46.10. Chinese, Sung dynasty (A. D. 960–1279). Gilt bronze Buddhist image; standing figure of Avalokiteśvara in Yünnanese style; gilding worn in places; figure of Amitābha in headdress; right hand in *vitarka mudrā*, left hand in *vara mudrā*. 0.494 x 0.114.

46.11. Chinese, A. D. 6th–7th century. Toilet box with cover; smooth green patina, incised landscape and dragon design on box and cover; quatrefoil and small loop on cover; three ball feet. 0.120 x 0.152.

GOLD

46.3. Korean, A. D. 8th–9th century. Headdress ornament, a standing Buddhist image in repoussé relief; surrounded by jeweled glory; 7 of the 19 jewels missing; jewel in *urna* missing; right hand held before breast, left hand pendant holding *māla*. 0.093 x 0.055.

MANUSCRIPT

45.41. Chinese, Ming dynasty (A. D. 1368–1644). By Ch'ên Hsien-hsiang (A. D. 1428–1500), a poem of 14 characters in ink on paper; signature of two characters, one seal; part of paper missing at lower edge. 1.834 x 0.915. (Illustrated.)

METALWORK

45.33. Bactrian, 1st century B. C.–1st century A. D. Bowl (or boss) of thick silver alloy; 12 human figures, a bear, a horse, and an eagle cast in relief on outside, traces of gilding remain. 0.044 x 0.191. (Illustrated.)

46.7. Chinese, Han dynasty (206 B. C.–A. D. 220). Iron mirror, much rusted with fragments of original silk container embedded in rust; gold sheet inlaid on back with cut-out figure designs and some repoussé linear designs. Diameter: 0.163.

PAINTING

45.37. Chinese, Ming dynasty (A. D. 1368–1644). By Sun Chih, dated in correspondence with A. D. 1579. Autumn landscape; ink and color on paper; signature, date and two seals on painting; six seals and five inscriptions on mount. 0.282 x 1.209.

45.38. Chinese, Ch'ing dynasty (A. D. 1644–1912). By Chou Hao (A. D. 1685–1773). A landscape in ink on paper; label, signature, six inscriptions and six seals on painting, three inscriptions and nine seals on mount. 0.139 x 3.721.

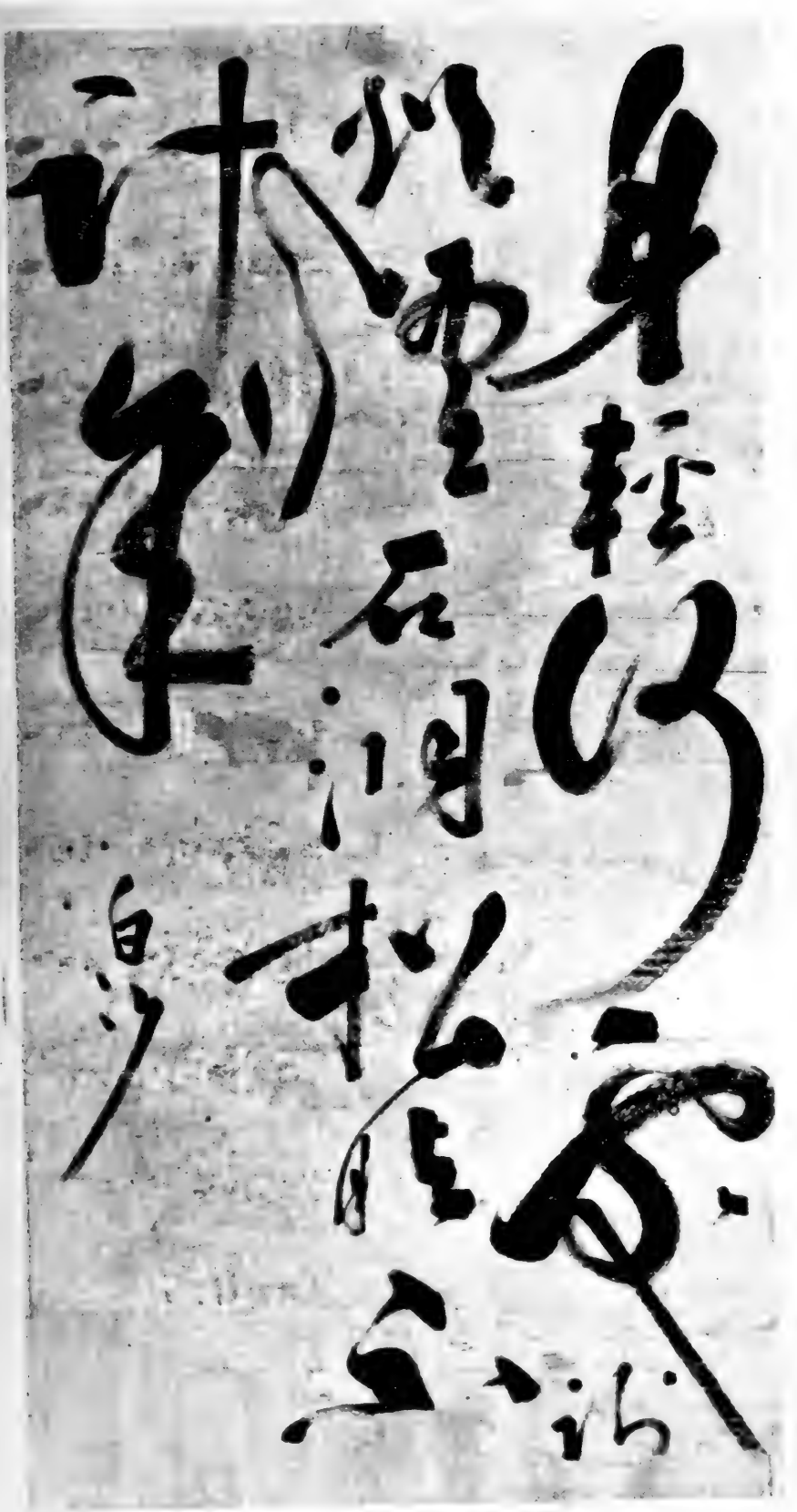
POTTERY

45.34. Chinese, Ch'ing dynasty (A. D. 1644–1912). Four-sided vase with animalistic handles, high foot; white porcelain, transparent colorless glaze decorated with overglaze enamels; six-character mark of the Ch'ien-lung period (1736–1796) in underglaze blue on base. 0.272 x 0.192 x 0.121.

45.35. Chinese, Ming dynasty (A. D. 1368–1644). Deep, thick-walled bowl; flat ring foot; white porcelain, transparent glaze over underglaze blue decoration; six-character mark of the Hsüan-tê period (1426–1435) in underglaze blue inside bottom. 0.126 x 0.266 (diameter).

45.36. Chinese, Ming dynasty (A. D. 1368–1644). Large jar of heavily potted white porcelain, transparent glaze over underglaze blue decoration; two *shou* characters included in design; six-character mark of the Chia-ching period (1522–1567) in underglaze blue on neck. 0.531 x 0.522 (diameter).

45.39–
45.40. Chinese, Ch'ing dynasty (A. D. 1644–1912). Pair of small bottles with six-lobed bodies and slender cylindrical necks; fine white porcelain covered with transparent glaze very faintly bluish in cast; decorated in underglaze blue and overglaze enamels; six-character mark of the Yung-chêng period (1723–1736) in underglaze blue on bases. 45.39: 0.104 x 0.058; 45.40: 0.105 x 0.058.



45.41

A recent addition to the collection of the Freer Gallery of Art.

45.33

46.5

Recent additions to the collection of the Freer Gallery of Art.

46.1. Chinese, Sung dynasty (A. D. 960–1279). Tall vase with cover; southern *Kuan* ware; fine gray clay, thinly potted, glossy bluish green-gray glaze, lightly crackled; decorated with figures in high relief: two tigers, two human figures on shoulder; cloud form with a character incised under the glaze on neck; bird finial and cloud forms on cover. 0.338 x 0.133.

46.6 Chinese, Ch'ing dynasty (A. D. 1644–1912). Compound vase formed of a central vase around which five similar forms are attached with internal communication; fine white porcelain, very pale-green transparent glaze; decoration with slip in low relief under glaze; six-character mark of the Ch'ien-lung period (1736–1796) in underglaze blue on base of central vase. 0.165 x 0.140.

46.9. Chinese, Sung dynasty (A. D. 960–1279). Vase, *Lung-ch'üan* celadon, bottle-shaped with tall cylindrical neck surrounded by flat horizontal flange ring; fine-grained light-gray porcelain, reddish brown at foot rim; thick, opaque gray-green celadon glaze filled with minute bubbles. 0.165 x 0.072.

The work of the staff members has been devoted to the study of new accessions, of objects submitted for purchase, and to general research work within the collections of Chinese, Japanese, Arabic, Persian, and Indian materials. The preparation of materials for publication and the revision of earlier work has continued. Reports, oral or written, were made upon 1,612 objects and 408 reproductions of objects submitted for examination by their owners, and 132 oriental language inscriptions were translated. Docent service and public lectures given by staff members are listed below.

REPAIRS TO THE COLLECTIONS

A total of 35 objects were repaired or remounted, as follows:

Chinese paintings remounted	9
Korean paintings remounted	2
Japanese paintings remounted	2
Chinese painting repaired	1
Chinese album covers repaired and remade	5
Arabic painting repaired	1
Persian paintings repaired	2
Chinese textiles repaired	2
Chinese lacquer repaired	1
Chinese jades repaired	2
Chinese bronze repaired	1
Chinese pottery repaired	3
Chinese stone sculpture repaired	1
Persian pottery repaired	1
Arabic manuscript mounted	1
Whistler lithograph repaired	1

CHANGES IN EXHIBITIONS

Changes in exhibitions totaled 662, as follows:

Chinese arts:	
Bamboo carving	4
Bronze	143
Bronze and gold	4
Bronze and jade	16
Gold	2
Gold and iron	4
Jade	183
Marble carving	3
Painting	63
Pottery	101
Silver and silver gilt	28
Wood sculpture	6
Japanese arts:	
Lacquer	11
Painting	42
Pottery	36
Korean arts:	
Pottery	16

ATTENDANCE

The Gallery was open to the public from 9 to 4:30 every day except Christmas Day. The total number of visitors to come in the main entrance was 97,822. The weekday total was 65,311, and the Sunday total was 32,511. The average weekday attendance was 203, the average Sunday attendance 626. The highest monthly attendance was in June, with 10,454 visitors; the lowest in December, with 3,874 visitors.

There were 1,625 visitors to the main office during the year; the purposes of their visits were as follows:

For general information		1,074
To see staff members		174
To read in the library		161
To make sketches and tracings from library books		6
To see building and installations		21
To make photographs, sketches, etc., in court		21
To examine, borrow, or purchase photographs and slides		324
To submit objects for examination		354
To see objects in storage:		
Washington Manuscripts	63	
Far Eastern paintings and textiles	47	
Near Eastern paintings and manuscripts	23	
Tibetan paintings	2	
Indian paintings and manuscripts	19	
American paintings	42	
Whistler prints	5	

To see objects in storage—Continued.

Oriental pottery, jade, bronze, lacquer, bamboo	102
Gold treasure and Byzantine objects	4
All sculpture	9
Syrian and other glass	7
	323

DOCENT SERVICE, LECTURES, MEETINGS

By request, 11 groups met in the exhibition galleries for instruction by staff members. Total attendance, 226.

Mrs. Usilton, librarian, gave three talks on indexing before the editors and indexers of the Dewey Decimal Classification System at the Library of Congress, October 23, 26, 30, 1945.

The Freer Gallery of Art auditorium was used for two meetings as follows:

January 12, 1946—The East-West Institute for Librarians. Attendance 228

The Director of the Gallery opened the meeting with a brief address of welcome.

May 18, 1946—The Art Technical Section of the American Association of Museums. Attendance 150

Members of the staff traveled outside of Washington for professional purposes as follows:

November 13–16, 1945	Mr. Wenley examined objects at various dealers in New York and attended an evening meeting of the trustees of the Textile Museum of Washington.
December 18, 1945	Miss Guest and Dr. Ettinghausen spent the day at the Walters Art Gallery in Baltimore studying Near Eastern collections.
February 1, 1946	Miss Guest spent the day at the University Museum in Philadelphia studying Near Eastern manuscripts.
March 13, 1946	Mr. Wenley spent the day at Princeton University attending a meeting with Professor Rowley regarding Princeton University Bicentennial, April 1–3, 1947.
April 17–18, 1946	Dr. Ettinghausen at Princeton University to see Prof. Ernst Herzfeld regarding gift of the Herzfeld Archive to the Smithsonian Institution for deposit in, and under the direction of, the Freer Gallery of Art.
May 31–June 24, 1946	Dr. Ettinghausen at University of Michigan, Ann Arbor, to do editorial work on Ars Islamica.
June 12–14, 1946	Mrs. Usilton attended annual convention of Special Libraries Association in Boston.

PERSONNEL

Isabel I. Mayer was appointed assistant in research August 1. William R. B. Acker reported for duty December 3, as associate in languages, after serving with the Office of War Information since

December 31, 1942. E. Harriet Link reported for duty as clerk-stenographer (CAF–5), March 18, after completion of her duties as staff aid with the American Red Cross overseas. John A. Pope reported for duty April 22, as associate in research, after completion of his duties as captain, United States Marine Corps Reserve. Grace Dunham Guest, Assistant Director, retired June 30. In recognition of her 26 years of outstanding service, she has been given the honorary title of Freer Gallery of Art research associate.

Respectfully submitted.

A. G. WENLEY, *Director.*

DR. A. WETMORE,
Secretary, Smithsonian Institution.

APPENDIX 5

REPORT ON THE BUREAU OF AMERICAN ETHNOLOGY

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1946, conducted in accordance with the act of Congress of June 27, 1944, which provides "* * * for continuing ethnological researches among the American Indians and the natives of Hawaii and the excavation and preservation of archeologic remains. * * *"

SYSTEMATIC RESEARCHES

Dr. M. W. Stirling, Chief of the Bureau, left Washington January 6, 1946, in order to continue work on the Smithsonian Institution-National Geographic Society archeological project in southern Mexico. From the latter part of January until the middle of April, archeological excavations were conducted at the site of San Lorenzo on the Río Chiquito in southern Veracruz. This was the site discovered by Dr. Stirling the preceding year at the conclusion of the work in Chiapas. During the season's work just concluded a map of the site was completed, several of the mounds were cross-sectioned, and a number of stratigraphic trenches dug.

During the course of the work 24 stone monuments were located, including 5 colossal heads of La Venta type, and 2 table-top altars. In addition, there were a number of miscellaneous monuments representing jaguars and seated figures, both human and anthropomorphic. The collections made during the course of the work, after inspection in Mexico City, were shipped to Washington. During the period of this work, Dr. Stirling was assisted in the field by Dr. Philip Drucker. Dr. Stirling returned to Washington on May 9.

During the fiscal year Dr. Frank H. H. Roberts, Jr., Assistant Chief, read and corrected page proof for the article, "The New World Paleo-Indian," which was printed in the general appendix to the Annual Report of the Smithsonian Institution for 1944. He prepared an article, "Prehistoric Peoples of Colorado," to be used as one chapter in a forthcoming history of Colorado which is being published by the State Historical Society of Colorado, and another article, "One Hundred Years of Smithsonian Anthropology," to be published in

Science. In addition he wrote two book reviews for anthropological journals, annotated six books for the United States Quarterly Book List, and worked on the final report on the investigations at the Lindenmeier–Folsom site.

On the basis of information obtained through correspondence with various members of the Virginia Archeological Society and from a review of the literature on Virginia, Dr. Roberts prepared a statement for the National Park Service, Region 1, on the archeological sites that would be inundated by the construction of dams and reservoirs in the James River Basin, beginning at Richmond and continuing up the main stream and its larger tributaries to the foot of the mountains. He also carried on extensive correspondence in connection with the agreement between the National Park Service and the Smithsonian Institution relative to archeological work in river basins where flood-control dams and irrigation projects will result in the flooding and loss of important archeological sites. This included preliminary plans for work in the Missouri Basin and suggestions and advice on the situation in the Etowah and Savannah River Valleys in Georgia, the Warrior River in Alabama, the Neches, Trinity, and Brazos Rivers in Texas, the Arkansas River and its tributaries in Arkansas and Oklahoma, and the Sacramento, American, Kings, and Kern Rivers in California. This entailed the writing of many letters to local people in the various areas seeking information about the existence of sites and the checking of the literature for additional information. In October Dr. Roberts was designated as director in charge of the archeological surveys and excavations to be conducted under the administration of the Smithsonian Institution in cooperation with the National Park Service, the Corps of Engineers, and the Bureau of Reclamation. In this connection he assisted officials of the National Park Service in preparing estimates and justifications for supplemental funds for 1946 and the funds for 1947 archeological work in the Missouri Basin.

Dr. Roberts also served as the general department representative on the Efficiency Rating Board of Review for the Smithsonian Institution, taking part in three hearings. In relation to this he attended two Civil Service Commission Institutes of Efficiency Rating Boards of Review and six sessions of the Interagency Conference on Training Aids and on Orientation.

On April 12 and 13, 1946, Dr. Roberts represented the Smithsonian Institution at the final convocation and other exercises of the sesquicentennial celebration of the University of North Carolina at Chapel Hill. During the year he also served on various committees for the Institution.

From July 1, 1945, to June 30, 1946, Dr. Roberts served as vice chairman of the division of anthropology and psychology of the National Research Council.

During the absences of the Chief, Dr. Roberts was Acting Chief of the Bureau.

Dr. John P. Harrington, ethnologist, spent the early part of the fiscal year in Washington, D. C., where he produced a Kiowa grammar of 405 manuscript pages and wrote 8 articles for scientific periodicals. During part of this period he was still engaged in work for the Bureau of Censorship.

Dr. Harrington left Washington February 11, 1946, for Clovis, N. Mex. There he interviewed Mr. Scheurich, grandson of Governor Bent, New Mexico's first Governor, and about 80 years of age. From Clovis, Dr. Harrington went directly to Gallup, N. Mex., where he continued his studies of Navaho phonetics. From Gallup he went to Albuquerque, N. Mex., where he worked with Mr. Shupla, expert speaker of the Hano language, which is related to Tewa. From Albuquerque he went to Santa Barbara, Calif., where he continued his Chumashan studies, and was engaged in this work at the close of the fiscal year.

Dr. Henry B. Collins, Jr., ethnologist, resumed his research on Eskimo archeology, which had been largely suspended during recent years because of his duties as Assistant Director, and later Director, of the Ethnogeographic Board. On December 31, 1945, the Board was formally dissolved, but on decision of the sponsoring agencies—the three research councils and the Smithsonian Institution—Dr. Collins continued operation of the office for an additional 6 months. The history of the Ethnogeographic Board, written by Dr. Wendell C. Bennett, was prepared for publication, and a Board project for a survey of wartime Government documents was begun January 1, 1946, under the direction of Dr. Homer G. Barnett, assisted by Walter B. Greenwood. The report on this project has been prepared by Dr. Barnett and will be published, with bibliography, in the near future.

Dr. Collins attended several meetings of the Board of Governors of the Arctic Institute of North America in Montreal, and contributed the section on anthropology for "A Program of Desirable Scientific Investigations in Arctic North America," issued as Bulletin No. 1 of the Arctic Institute. Several book reviews were also prepared for the United States Quarterly Book List and other scientific journals.

As a member of the Committee on International Cooperation in Anthropology of the National Research Council, Dr. Collins assembled from committee records and other sources information on the activities of anthropological societies, universities, and museums in Scan-

dinavia during the war. This was published in the American Anthropologist under the title "Anthropology During the War: Scandinavia."

During the month of July 1945, Dr. William N. Fenton was engaged in a study of place names and related activities of the Cornplanter Senecas. When completed, this series, on which M. H. Deardorff of Warren, Pa., and C. E. Congdon of Salamanca, N. Y., have collaborated, will comprise the Indian names of places throughout the valley of the Allegheny River. Another problem on which work was continued was the documenting and description of the Condolence Council for installing chiefs in the Iroquois League, the study of which the late J. N. B. Hewitt had commenced a generation ago. Having collected the sacred songs and ritual chants of this ceremony for the Library of Congress in the spring, Dr. Fenton returned to the Six Nations Reserve on October 29, 1945, in the Recording Laboratory sound truck for the purpose of making a documentary film. Dr. Fenton was invited to sit in on the rehearsals and attend the installation of two Cayuga chiefs on November 20, 1945. The family of one of the candidates, Chief John Hardy Gibson, has served American ethnology for two generations, and with the help of Howard Skye and the cooperation of the chiefs, a complete transcript of the proceedings of the Condolence Council among the Canadian Iroquois was prepared and published for the first time since Horatio Hale's account in the last century. This material, written up on returning from the field, became the body of an illustrated lecture on "The Six Nations of Canada," which Dr. Fenton was invited to deliver before the Royal Canadian Institute of Toronto, January 12, 1946. In the field, Ernest Dodge, of the Peabody Museum of Salem, collaborated in recording some rare Iroquois flute music from James White, Onondaga of Six Nations. In addition, a complete performance of the Dark Dance Rite of the Little People was recorded with Eli Jacob, Cayuga of Sour Springs, as leading singer. Similar recordings were made of the Death Feast ritual in the spring, and from Howard Skye, an official of the ceremony, Dr. Fenton obtained a fairly complete account of the fall celebration. The same informant helped translate a Cayuga text of the Tutelo Migration Legend, collected by Hewitt. Returning by way of Allegany Reservation, near Salamanca, N. Y., material for a second album of Iroquois songs was collected from singers at Coldspring Longhouse. Christian hymns in Seneca were recorded near West Salamanca to extend coverage of hymn singing already collected in Mohawk and Oneida. Acknowledgment is due the Viking Fund of New York for support of this field work.

An outstanding event in Iroquois studies was the organization and conduct of the First Conference on Iroquois Research, held October

26–28 at the Allegany State Park, N. Y. Discussions were devoted to ethnology, linguistics, and archeology with reference to the Lower Great Lakes area. The proceedings of the conference, written by Dr. Fenton, were distributed to the 20 persons in attendance and to others interested. Dr. Fenton attended a similar conference on the prehistory of eastern New York and New England, held February 22, 1946, at the New York State Museum, Albany.

"Area Studies in American Universities" reclaimed D. Fenton's attention, when the Commission on Implications of Armed Services Educational Programs, of the American Council on Education, requested him to prepare a report for publication on the Ethnogeographic Board's Survey of the Foreign Area and Language Training Programs of the ASTP and the Civil Affairs Training Schools during 1943–44. The manuscript for the final report, totaling some 180 pages, was virtually completed at the close of the fiscal year. Completion of this report coincided with the end of the Ethnogeographic Board and discharged a final obligation to that wartime activity.

The following publications by Dr. Fenton appeared during the year:

Place names and related activities of the Cornplanter Senecas (Pennsylvania Archaeologist):
III. Burnt-house at Cornplanter Grant, vol. 15, No. 3, pp. 88–96.
IV. Cornplanter Peak to Warren, vol. 15, No. 4, pp. 108–118.
V. The Path to Conewango, vol. 16, No. 2, pp. 42–56.

(With J. N. B. Hewitt) Some mnemonic pictographs relating to the Iroquois Condolence Council (Journal of the Washington Academy of Sciences, vol. 35, No. 10, October 15, 1945, pp. 301–315).

An Iroquois Condolence Council for installing Cayuga chiefs in 1945 (Journal of the Washington Academy of Sciences, vol. 36, No. 4, April 15, 1946, pp. 110–127).

Dr. Philip Drucker, anthropologist, resumed his duties at the Bureau of American Ethnology on December 17, 1945, after release to inactive duty by the Navy. He departed almost immediately for Mexico to assemble equipment, set up camp, and make preparations for excavating a site in southeastern Veracruz, San Lorenzo, that had been selected by Dr. M. W. Stirling, Chief of the Bureau, for this season's work by the National Geographic Society-Smithsonian Institution cooperative expedition. On Dr. Stirling's arrival, in the latter part of January, Dr. Drucker remained as his assistant. Intensive excavations were carried out in various mounds and other features of the site, and numerous stone monuments, including altars, statues, and tremendous monolithic heads of "Olmec" or "La Venta" type were found. While Dr. Stirling occupied himself with a study of the

monuments, Dr. Drucker made tests to locate an occupational zone, and dug a deep stratigraphic trench to obtain ceramic materials to define the culture horizon to which the monuments belong. The material from these investigations will be of inestimable value in tying in the monuments with those of Tres Zapotes and La Venta, and defining the ancient "Olmec" culture.

Following the close of the expedition's camp in mid-April, Dr. Drucker proceeded to the neighboring state of Chiapas to carry out reconnaissance planned to supplement that done by Dr. Stirling the previous year. He was able to locate a number of caves containing offerings or caches of pottery vessels from pre-Spanish times, and made collections which were shipped to Mexico City for ultimate shipment to Washington. In addition to the caves, a number of extensive village sites were discovered which contained not only remains of stone houses but also ball courts and great ceremonial structures of masonry.

On May 21 Dr. Drucker proceeded to Mexico City where the San Lorenzo and Chiapas collections were inspected by officers of the Museo Nacional de Mexico, and where, through the courtesy of those officers, permission was obtained to ship the collections to Washington for study and for preparation of reports for publication. While the shipping permit was going through necessary channels, Dr. Drucker availed himself of the opportunity of studying ceramic and jade collections in the Museo Nacional, and to visit sites in the central highland where important discoveries have been made in recent years, such as Tula, in the state of Hidalgo, and Xochicalco, in Morelos. At the end of the fiscal year he was completing preparations to return to Washington.

During the month of July 1945 Dr. Gordon Willey, anthropologist, was entirely occupied in completing a 50,000-word manuscript entitled "Excavations in Southeast Florida." This paper will make available the results of the archeological field program carried out in south Florida in 1933–36 by the Bureau of American Ethnology in conjunction with the State of Florida.

From August 1945 to February 1946 Dr. Willey was primarily engaged in editorial work on the final volumes of the Handbook of South American Indians. The fifth and last volume of this work was submitted to the editor of the Bureau at the end of February, with the exception of part 3, "The languages of South America," which is being prepared by Dr. J. Alden Mason. During this period a 25,000-word article on South American ceramics was prepared for inclusion in the Handbook, and a 3,000-word article on the archeology of the Argentine pampas was prepared to be published as part of a Yale University symposium on Argentine archeology.

During the early part of 1946 Dr. Willey also assisted Dr. Roberts in preparing preliminary plans for the Federal Valley Authority archeological program.

In February a brief survey trip was made to Georgia on the proposed Allatoona River control project.

From March until June Dr. Willey was engaged in conducting archeological field work in the Virú Valley in northern Peru, for a proposed study of prehistoric settlement patterns in the valley. At the close of the fiscal year Dr. Willey was still engaged in this field work.

INSTITUTE OF SOCIAL ANTHROPOLOGY

The Institute of Social Anthropolgy was created in 1943 as an autonomous unit of the Bureau of American Ethnology, to carry out cooperative training in anthropological teaching and research with the other American republics. As the Director, Dr. Julian H. Steward, was instructed in the official order establishing the Institute to report to the Secretary of the Smithsonian Institution; there is presented here his report to Secretary Wetmore.

Washington office.—The Institute of Social Anthropology, carrying out a program of cultural and scientific cooperation with the American republics under a grant of $77,351 transferred from the Department of State, continued under the directorship of Dr. Julian H. Steward. Miss Ethelwyn Carter served as secretary throughout the year.

Mexico.—In Mexico the Institute was represented by Dr. George M. Foster, Jr., anthropologist, in charge of the work; by Dr. Stanley S. Newman, linguist; and by Dr. Robert C. West, cultural geographer, who joined the staff in February 1946, when Dr. Donald Brand resigned to resume his teaching duties at the University of New Mexico.

Since cooperation with the Escuela Nacional de Anthropología began in June 1944, 15 university courses in anthropology, geography, and linguistics have been given, attended by more than 100 individual students. Total enrollment in all courses has exceeded 150. Because of the international nature of the Escuela, it has been possible to reach students from countries other than Mexico, including Haiti, Guatemala, Costa Rica, Panama, Colombia, Spain, France, Canada, and the United States. In both courses and field work, students have had an opportunity to learn American techniques, methodology, and, above all, ideals of scholarship.

Basic field reasearch on the important Tarascan population of Michoacán has been conducted. Institute staff members have put 24 man-months, and the seven participating students 55 man-months, into this research. The field work of the Institute, in conjunction with previous studies, has resulted in the most complete body of cultural

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data available on any comparable area in Latin America. One large monograph on the Tarascan area has already been published, and three more will follow in 1947. Six student papers of from 100 to 200 manuscript pages are also being prepared for publication in Spanish by the Escuela.

Peru.—Dr. F. Webster McBryde, cultural geographer, was assigned in September 1945 to take charge of the Institute work in Peru. Harry Tschopik, Jr., continued his work in Peru throughout the year.

The accomplishments can be shown best by a résumé of the work since it began early in 1944. At this time, Peru had no institution devoted essentially to social science teaching and research, and its geographical society was requesting advice from the United States about its proposed reorganization. The cooperation of the Institute has helped the Ministry of Education of Peru to establish a well-financed national center of social science, the Instituto de Estudios Etnológicos. The Instituto, dedicated to teaching, research, and publication, is a most important development, because for the first time Peru can obtain scientific information on her native peoples, who are the predominant element in her contemporary population. The staff of the Peruvian office of the Institute of Social Anthropology has given lectures at the Universities of Cuzco and Trujillo, and courses in geography and anthropology are planned for the Instituto, thus enabling Peruvian students to obtain training in United States techniques of social science. Dr. McBryde has helped in the reorganization of the geographical society and has advised on changes in the geography curriculum in San Marcos University in Lima.

The Institute staff has carried out extensive research among Peruvian coastal and central highland communities. The latter project, done in cooperation with three Peruvian scientists, involved 36 man-months and included 30 different communities. The data will be published in both Spanish and English in several monographs, two of which already are in press. They not only represent significant contributions to knowledge on heretofore little-known groups, but also will be very useful to Peruvian authorities interested in such practical problems as that of obtaining laborers for the high Andean mines and that of colonizing sparsely populated areas of eastern Peru, a matter of prime importance to the agricultural experimental stations. At the request of the Peruvian-Bolivian educational commission, a survey will be made of the settlement patterns of the altiplano to provide a basis for the establishment of rural schools.

The importance of these research results has been acknowledged and stressed by the Minister of Education in a speech before the Peruvian Congress.

Brazil.—Cooperation with the Escola Livre de Sociologia e Politica began October 1, 1945, when Dr. Donald Pierson was assigned as representative of the Institute of Social Anthropology to Brazil. In February 1946, Dr. Kalervo Oberg was assigned as cultural anthropologist to cooperate with the Escola Livre.

In effect, the Institute has taken over and expanded a program which was begun under Dr. Pierson in 1940 and which has helped make the Escola Livre one of the most important social science centers in South America. Seven courses in sociology and anthropology are now being given by the Institute staff. Students in the social science major have increased from 5 in 1945 to 24 in 1946. The first masters degrees in social science were given in February 1946. With the help of the Institute staff, it has been possible to increase the undergraduate curriculum from 3 to 4 years, a very distinct educational gain.

Institute staff members have continued to guide the program of translating 200 articles and 13 books from English into Portuguese. This work, financed by outside funds, is of great importance as an aid to teaching.

Field research to be started this year will meet the outstanding need of Brazilian students, namely, intensive training in field methods through their application. The research results will be published in English and Portuguese. Surveys in Matto Grosso and rural areas near São Paulo have already been carried out by Institute staff members and students.

Publications.—Publication No. 2, "Cherán: A Sierra Tarascan Village," by R. L. Beals, was issued during the year. Publication No. 3, "Moche, a Peruvian Coastal Community," by John Gillin, and Publication No. 4, "Cultural and Historical Geography of Southwest Guatemala," by Felix Webster McBryde, were received in proof. Publication No. 5, "Highland Communities of Central Peru: A Regional Survey," by Harry Tschopik, Jr., was sent to the printer. Publication No. 6, "Empire's Children: Tzintzuntzan and its People," by George M. Foster, Jr., was contracted for by a printer in Mexico. Mrs. Eloise B. Edelen, of the editorial staff of the Bureau of American Ethnology, did the editorial work on these publications.

Handbook of South American Indians.—No grant from the Department of State for cooperation with the American republics was requested for the Handbook during the fiscal year 1946. The final preparation of the manuscript and clerical work pertaining to the Handbook was undertaken by the Washington office of the Institute of Social Anthropology, with the assistance of Dr. Gordon Willey, of the Bureau of American Ethnology.

Volume 1, The Marginal Tribes, and volume 2, The Andean Civilizations, were issued in June 1946. In addition to the usual edition of 3,500 distributed by the Bureau of American Ethnology, the Department of State ordered 600 copies for distribution through its embassies in Latin American countries, and the Superintendent of Documents ordered 1,000 for sale. Volume 3, The Tropical Forest Tribes, and volume 4, The Circum-Caribbean Tribes, were received in galley proof. With the exception of the linguistic section, volume 5, The Comparative Anthropology of South American Indians, was completed and submitted to the editor of the Bureau of American Ethnology for the final editing.

During the fiscal year, the Interdepartmental Committee on Scientific and Cultural Cooperation of the Department of State granted the Bureau of American Ethnology $15,000 toward the cost of publishing the Handbook.

SPECIAL RESEARCHES

Miss Frances Densmore, a collaborator of the Bureau, prepared for publication a paper entitled "Music of the Alabama Texas." In this tribe, Miss Densmore found that only ordinary dance songs remain.

She also submitted her complete bibliography covering 50 years of study of American Indian music and a paper entitled "Prelude to the Study of Indian Music in Minnesota." Another long paper was completed on the subject "Distribution of Certain Peculiarities in Indian Songs." This paper is illustrated with a number of distribution maps.

EDITORIAL WORK AND PUBLICATIONS

The editorial work of the Bureau continued during the year under the immediate direction of the editor, M. Helen Palmer. There were issued one Annual Report and one Bulletin, listed below; also two volumes of a five-volume Bulletin, and one publication of the Institute of Social Anthropology.

Sixty-second Annual Report of the Bureau of American Ethnology, 1944–1945. 9 pp.

Bulletin 137. The Indians of the Southeastern United States, by John R. Swanton. 943 pp., 108 pls., 5 figs., 13 maps.

The following publications were in press at the close of the fiscal year:

Bulletin 143. Handbook of South American Indians. Julian H. Steward, editor. Volume 3: The Tropical Forest Tribes. Volume 4: The Circum-Caribbean Tribes.

Institute of Social Anthropology Publ. No. 3. Moche, a Peruvian Coastal Community, by John Gillin.

Institute of Social Anthropology Publ. No. 4. Cultural and historical geography of Southwest Guatemala, by Felix Webster McBryde.

Institute of Social Anthropology Publ. No. 5. Highland Communities of Central Peru: A regional survey, by Harry Tschopik, Jr.

Publications distributed totaled 12,730. As compared with the fiscal year 1944–45, this was an increase of 1,160.

In addition to the regular Bureau work, the editorial staff conducted the editorial work on the publications of the Institute of Social Anthropology.

LIBRARY

There has been no change in the library staff during the fiscal year. Accessions during the year totaled 109. There has been a marked falling off in the number of gifts to the library, doubtless due to the disturbed condition of the publishing industry following the end of the war. Though there is a slight decrease in exchange material in the form of books which are entered on the accession book, there has been a very great increase in exchange material as a whole. Large shipments, covering the period since 1939 or 1940 to date, have been received from many of our exchanges in Europe and other parts of the world. Many of our sets have thus been brought up to date without inquiry on our part.

The routine of accessioning and cataloging new material has been kept up to date. A small amount of work has been possible, also, on analytical entries for periodical material. It is hoped that this work will soon be brought up to date.

ILLUSTRATIONS

E. G. Cassedy, illustrator, spent most of his time from July 1945 through April 1946 on art work for the Old Apothecary Shop, a new exhibit in the National Museum. Other work of routine nature was done for the Handbook of South American Indians and for other branches of the Institution.

ARCHIVES

Miss Mae W. Tucker continued her work of operating and cataloging the manuscript and photographic archives of the Bureau. In addition to furnishing material for routine requests for photographs and manuscripts, many qualified visitors were received and furnished with materials or working facilities.

The Mohawk Dictionary, copied by Mrs. Erminnie Smith from records in Canada, was alphabetized and filed for more ready refer-

ence. A number of the Iroquoian vocabularies collected by Mrs. Smith and J. N. B. Hewitt and recorded in the Powell Outline volumes were copied on cards and filed for more convenient reference. The number of these cards so far completed is approximately 7,500. Personal and place names numbering about 600 were copied from New York State historical documents and placed in the card catalog. The Nez Percé dictionary compiled by Miss S. L. McBeth was copied on cards from the original manuscript in the Bureau collection. These cards number about 2,000.

Early in 1946 preparation was begun for a catalog of the unpublished manscript material in the Bureau archives, to be published for distribution. In order to insure as accurate a catalog as possible the material is being checked piece by piece and listed on memorandum sheets for the final typing.

COLLECTIONS

Collections transferred by the Bureau of American Ethnology to the Department of Anthropology, United States National Museum, during the fiscal year were as follows:

Accession No.

171677. One elk-horn quirt from the Pawnee Indians. Collected about 1877 near Columbus, Nebr., by Elon J. Lawton, M. D.

MISCELLANEOUS

During the course of the year information was furnished by members of the Bureau staff in reply to numerous inquiries concerning the American Indians of both continents, both past and present. Various specimens sent to the Bureau were identified and data on them furnished for their owners.

Personnel.—Dr. Philip Drucker, anthropologist, returned to duty from military furlough on December 17, 1945. Dr. Homer G. Barnett resigned December 31, 1945. Mrs. Catherine M. Phillips, clerk-stenographer, transferred to the War Department May 21, 1945, and Mrs. Jessie S. Shaw was promoted to fill this vacancy effective June 3, 1946, by transfer from the division of ethnology, United States National Museum.

Respectfully submitted.

M. W. Stirling, *Chief.*

Dr. A. Wetmore,
Secretary, Smithsonian Institution.

APPENDIX 6

REPORT ON THE INTERNATIONAL EXCHANGE SERVICE

SIR: I have the honor to submit the following report on the activities of the International Exchange Service for the fiscal year ended June 30, 1946:

From the appropriation general expenses, Smithsonian Institution, there was allocated at the beginning of the year $28,166 for the expenses of the Service. After conditions became favorable for the safe transmission to some of the countries where exchanges had been suspended during the war, the Institution requested and was granted a deficiency appropriation of $47,000. This increased the available appropriation to $75,166. As it was not possible to make shipments to all the previously suspended countries, the total expenditure amounted to only about $48,080.25.

The number of packages received for transmission during the year was 540,502, an increase over the previous year of 153,744. The weight of these packages was 472,229 pounds, an increase of 261,139. The average weight of the individual package is almost double that of the previous year—an indication that the institutions are shipping some of the material held during the war. The material is classified as shown in the following table:

	Packages		Weight	
	Sent abroad	Received from abroad	Sent abroad	Received from abroad
			Pounds	*Pounds*
United States parliamentary documents sent abroad	319,036		127,863	
Publications received in return for parliamentary documents		2,267		6,485
United States departmental documents sent abroad	71,951		75,935	
Publications received in return for departmental documents		4,043		12,411
Miscellaneous scientific and literary publications sent abroad	122,708		184,422	
Miscellaneous scientific and literary publications received from abroad for distribution in the United States		20,497		65,183
Total	513,695	26,807	388,220	84,079
Grand total	540,502		472,299	

The packages are forwarded partly by mail direct to the addressees and partly by freight to the exchange bureaus. The number of boxes

shipped abroad was 3,117, an increase of 2,134. Of these boxes, 1,294 were for depositories of full sets of the United States Government documents. The number of packages distributed by mail was 69,833.

Of the material accumulated at the Institution during the war, there remained at the beginning of the fiscal year 3,512 boxes. At the end of the fiscal year this figure had been reduced to 1,109. This reduction was effected through the resumption of exchanges with certain countries where exchange had been suspended during the war. These countires are indicated in the table below by an asterisk.

The countries to which consignments are now regularly forwarded are:

EASTERN HEMISPHERE:

Africa.
Australia.
*Belgium.
*Bulgaria.
*China.
*Czechoslovakia.
*Denmark.
*France.
Great Britain.
*Greece.
India.
Ireland.
*Lebanon.
*Netherlands.
New Zealand.
*Norway.
*Palestine.
Portugal.
*Spain.
*Sweden.
*Switzerland.
*Syria.
Union of Soviet Socialist Republics.

WESTERN HEMISPHERE: All countries except the United States and her possessions.

Shipments to other countires will be resumed at the earliest practicable date.

FOREIGN DEPOSITORIES OF GOVERNMENTAL DOCUMENTS

The number of sets of United States official publications received to be sent in return for the official publications sent by foreign governments for deposit in the Library of Congress is 93 (56 full and 37 partial sets). The depositories for China and Italy have been changed as indicated in the list.

DEPOSITORIES OF FULL SETS

ARGENTINA: Dirección de Investigaciones, Archivo, Biblioteca y Legislación Extranjero, Ministerio de Relaciones Exteriores y Culto, Buenos Aires.

AUSTRALIA: Commonwealth Parliament and National Library, Canberra.
NEW SOUTH WALES: Public Library of New South Wales, Sydney.
QUEENSLAND: Parliamentary Library, Brisbane.
SOUTH AUSTRALIA: Public Library of South Australia, Adelaide.
TASMANIA: Parliamentary Library, Hobart.
VICTORIA: Public Library of Victoria, Melbourne.
WESTERN AUSTRALIA: Public Library of Western Australia, Perth.

BELGIUM: Bibliothèque Royale, Bruxelles.

BRAZIL: Instituto Naçional do Livro, Rio de Janeiro.

CANADA: Library of Parliament, Ottawa.
MANITOBA: Provincial Library, Winnipeg.
ONTARIO: Legislative Library, Toronto.
QUEBEC: Library of the Legislature of the Province of Quebec.
CHILE: Biblioteca Nacional, Santiago.
CHINA: Ministry of Education, National Library, Nanking, China.
PEIPING: National Library of Peiping.
COLOMBIA: Biblioteca Nacional, Bogotá.
COSTA RICA: Oficina de Depósito y Canje Internacional de Publicaciones, San José.
CUBA: Ministerio de Estado, Canje Internacional, Habana.
CZECHOSLOVAKIA: Bibliothèque de l'Assemblée Nationale, Prague.
DENMARK: Kongelige Danske Videnskabernes Selskab, Copenhagen.
EGYPT: Bureau des Publications, Ministère des Finances, Cairo.
ESTONIA: Riigiraamatukogu (State Library), Tallinn.
FINLAND: Parliamentary Library, Helsinki.
FRANCE: Bibliothèque Nationale, Paris.
GERMANY: Reichstauschstelle im Reichsminsterium für Wissenschaft, Erziehung und Volksbildung, Berlin, N. W. 7.
PRUSSIA: Preussische Staatsbibliothek, Berlin, N. W. 7.
GREAT BRITIAN:
ENGLAND: British Museum, London.
LONDON: London School of Economics and Political Science. (Depository of the London County Council.)
HUNGARY: Library, Hungarian House of Delegates, Budapest.
INDIA: Imperial Library, Calcutta.
IRELAND: National Library of Ireland, Dublin.
ITALY: Ministero della Publica Istruxione, Rome.
JAPAN: Imperial Library of Japan, Tokyo.
LATVIA: Bibliothèque d'État, Riga.
LEAGUE OF NATIONS: Library of the League of Nations, Geneva, Switzerland.
MEXICO: Secretaría de Relaciones Exteriores, Departamento de Información para el Extranjero, Mexico, D. F.
NETHERLANDS: Royal Library, The Hague.
NEW ZEALAND: General Assembly Library, Wellington.
NORTHERN IRELAND: H. M. Stationery Office, Belfast.
NORWAY: Universitets-Bibliothek, Oslo. (Depository of the Government of Norway.)
PERU: Sección de Propaganda y Publicaciones, Ministerio de Relaciones Exteriores, Lima.
POLAND: Bibliothèque Nationale, Warsaw.
PORTUGAL: Biblioteca Nacional, Lisbon.
RUMANIA: Academia Română, Bucharest.
SPAIN: Cambio Internacional de Publicaciones, Avenida Calvo Sotelo 20, Madrid.
SWEDEN: Kungliga Biblioteket, Stockholm.
SWITZERLAND: Bibliothèque Centrale Fédérale, Berne.
TURKEY: Department of Printing and Engraving, Ministry of Education, Istanbul.
UNION OF SOUTH AFRICA: State Library, Pretoria, Transvaal.
UNION OF SOVIET SOCIALIST REPUBLICS: All-Union Lenin Library, Moscow 115.
UKRAINE: Ukrainian Society for Cultural Relations with Foreign Countries, Kiev.

URUGUAY: Oficina de Canje Internacional de Publicaciones, Montevideo.
VENEZUELA: Biblioteca Nacional, Caracas.
YUGOSLAVIA: Ministère de l'Éducation, Belgrade.

DEPOSITORIES OF PARTIAL SETS

AFGHANISTAN: Library of the Afghan Academy, Kabul.
BOLIVIA: Biblioteca del Ministerio de Relaciones Exteriores y Culto, La Paz.
BRAZIL:
MINAS GERAES: Directoria Geral e Estatistica em Minas, Bello Horizonte.
BRITISH GUIANA: Government Secretary's Office, Georgetown, Demerara.
CANADA:
ALBERTA: Provincial Library, Edmonton.
BRITISH COLUMBIA: Provincial Library, Victoria.
NEW BRUNSWICK: Legislative Library, Fredericton.
NOVA SCOTIA: Provincial Secretary of Nova Scotia, Halifax.
PRINCE EDWARD ISLAND: Legislative and Public Library, Charlottetown.
SASKATCHEWAN: Legislative Library, Regina.
CEYLON: Chief Secretary's Office, Record Department of the Library, Colombo.
DOMINICAN REPUBLIC: Biblioteca de la Universidad de Santo Domingo, Ciudad Trujillo.
ECUADOR: Biblioteca Nacional, Quito.
GUATEMALA: Biblioteca Nacional, Guatemala.
HAITI: Bibliothèque Nationale, Port-au-Prince.
HONDURAS:
Biblioteca y Archivo Nacionales, Tegucigalpa.
Ministerio de Relaciones Exteriores, Tegucigalpa.
ICELAND: National Library, Reykjavik.
INDIA:
BENGAL: Library, Bengal Legislature, Assembly House, Calcutta.
BIHAR AND ORISSA: Revenue Department, Patna.
BOMBAY: Undersecretary to the Government of Bombay, General Department, Bombay.
BURMA: Secretary to the Government of Burma, Education Department, Rangoon.
PUNJAB: Chief Secretary to the Government of the Punjab, Lahore.
UNITED PROVINCES OF AGRA AND OUDH: University of Allahabad, Allahabad.
IRAN: Imperial Ministry of Education, Tehran.
IRAQ: Public Library, Baghdad.
JAMAICA: Colonial Secretary, Kingston.
LIBERIA: Department of State, Monrovia.
MALTA: Minister for the Treasury, Valleta.
NEWFOUNDLAND: Department of Home Affairs, St. John's.
NICARAGUA: Ministerio de Relaciones Exteriores, Managua.
PANAMA: Ministerio de Relaciones Exteriores, Panama.
PARAGUAY: Ministerio de Relaciones Exteriores, Sección Biblioteca, Asunción.
SALVADOR:
Biblioteca Nacional, San Salvador.
Ministerio de Relaciones Exteriores, San Salvador.
SIAM: Department of Foreign Affairs, Bangkok.
VATICAN CITY: Biblioteca Apostolica Vaticana, Vatican City, Italy.

INTERPARLIAMENTARY EXCHANGE OF THE OFFICIAL JOURNAL

There are now being sent abroad 68 copies of the Federal Register and 63 copies of the Congressional Record. The countries to which these journals are being forwarded are given in the following list:

DEPOSITORIES OF CONGRESSIONAL RECORD AND FEDERAL REGISTER

ARGENTINA:
Biblioteca del Congreso Nacional, Buenos Aires.
Biblioteca del Poder Judicial, Mendoza.[2] *
Cámara de Diputados, Oficina de Información Parlamentaria, Buenos Aires.
Boletín Oficial de la República Argentina, Ministerio de Justica e Instrucción Pública, Buenos Aires.

AUSTRALIA:
Commonwealth Parliament and National Library, Canberra.
NEW SOUTH WALES: Library of Parliament of New South Wales, Sydney.
QUEENSLAND: Chief Secretary's Office, Brisbane.
WESTERN AUSTRALIA: Library of Parliament of Western Australia.

BRAZIL:
Biblioteca do Congresso Nacional, Rio de Janeiro.
Imprensa Nacional, Rio de Janeiro.[2] *
AMAZONAS: Archivo, Biblioteca e Imprensa Publica, Manáos.
BAHIA: Governador do Estado da Bahia, São Salvador.
ESPIRITO SANTO: Presidencia do Estado do Espirito Santo, Victoria.
RIO GRANDE DO SUL: "A Federação," Porto Alegre.
SERGIPE: Biblioteca Publica do Estado de Sergipe, Aracajú.
SÃO PAULO: Imprensa Oficial do Estado, São Paulo.

BRITISH HONDURAS: Colonial Secretary, Belize.

CANADA:
Library of Parliament, Ottawa.
Clerk of the Senate, Houses of Parliament, Ottawa.

CUBA:
Biblioteca del Capitolio, Habana.
Biblioteca Publica Panamericana, Havana.[2] *

EGYPT: Ministry of Foreign Affairs, Egyptian Government, Cairo.[1]

FRANCE: Bibliothèque du Senat, Paris.

GREAT BRITAIN: Printed Library of the Foreign Office, London.

GREECE: Library, Greek Parliament, Athens.*

GUATEMALA: Biblioteca de la Asamblea Legislativa, Guatemala.

HAITI: Bibliothèque Nationale, Port-au-Prince.

HONDURAS: Biblioteca del Congreso Nacional, Tegucigalpa.

INDIA: Legislative Department, Simla.

ITALY: International Institute for the Unification of Private Law, Rome.[2] *

IRELAND: Dail Eireann, Dublin.

MEXICO:
Dirección General de Información, Secretaría de Gobernación, Mexico, D. F.
Biblioteca Benjamin Franklin, Mexico, D. F.

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*Added during year.
[1] Congressional Record only.
[2] Federal Register only.

MEXICO—Continued.
AGUASCALIENTES: Gobernador del Estado de Aguascalientes, Aguascalientes.
CAMPECHE: Gobernador del Estado de Campeche, Campeche.
CHIAPAS: Gobernador del Estado de Chiapas, Tuxtla Gutierrez.
CHIHUAHUA: Gobernador del Estado de Chihuahua, Chihuahua.
COAHUILA: Periódico Oficial del Estado de Coahuila, Palacio de Gobierno, Saltillo.
COLIMA: Gobernador del Estado de Colima, Colima.
DURANGO: Gobernador Constitucional del Estado de Durango, Durango.
GUANAJUATO: Secretaría General de Gobierno del Estado, Guanajuato.
GUERRERO: Gobernador del Estado de Guerrero, Chilpancingo.
JALISCO: Biblioteca del Estado, Guadalajara.
LOWER CALIFORNIA: Gobernador del Distrito Norte, Mexicali.
MÉXICO: Gaceta del Gobierno, Toluca.
MICHOACÁN: Secretaría General de Gobierno del Estado de Michoacán, Morelia.
MORELOS: Palacio de Gobierno, Cuernavaca.
NAYARIT: Gobernador de Nayarit, Tepic.
NUEVO LEÓN: Biblioteca del Estado, Monterrey.
OAXACA: Periódico Oficial, Palacio de Gobierno, Oaxaca.
PUEBLA: Secretaría General de Gobierno, Puebla.
QUERÉTARO: Secretaría General de Gobierno, Sección de Archivo, Querétaro.
SAN LUIS POTOSÍ: Congreso del Estado, San Luis Potosí.
SINALOA: Gobernador del Estado de Sinaloa, Culiacán.
SONORA: Gobernador del Estado de Sonora, Hermosillo.
TABASCO: Secretaría General de Gobierno, Sessión 3a, Ramo de Prensa, Villahermosa.
TAMAULIPAS: Secretaría General de Gobierno, Victoria.
TLAXCALA: Secretaría de Gobierno del Estado, Tlaxcala.
VERACRUZ: Gobernador del Estado de Veracruz, Departmento de Gobernación y Justicia, Jalapa.
YUCATÁN: Gobernador del Estado de Yucatán, Mérida.
NEW ZEALAND: General Assembly Library, Wellington.
PERU: Cámara de Diputados, Lima.
POLAND: Ministry of Justice, Warsaw.[2] *
SPAIN: Diputacion of Navarra, San Sebastian.
SWITZERLAND: Biblioteque, Bureau International du Travail, Geneva.[2] *
UNION OF SOUTH AFRICA:
CAPE OF GOOD HOPE: Library of Parliament, Cape Town.
TRANSVAAL: State Library, Pretoria.
URUGUAY: Diario Oficial, Calle Florida 1178, Montevideo.
VENEZUELA: Biblioteca del Congreso, Caracas.

FOREIGN EXCHANGE AGENCIES

Austria, to which exchanges were formerly sent by way of Germany, has now established her own exchange bureau. Those countries listed below to which exchanges are not yet being sent are: Germany, Japan, Latvia, Rumania, and Yugoslavia. The bureaus whose address has

*Added during year.
[2] Federal Register only.

changed during the year are marked by an asterisk. The bureaus or agencies listed are those to which consignments are forwarded by freight. To other countries not appearing on the list, packages are sent by mail.

LIST OF AGENCIES

AUSTRIA: Austrian National Library, Vienna.

BELGIUM: Service Belge des Échanges Internationaux, Bibliothèque Royale de Belgique, Bruxelles.

*CHINA: Bureau of International Exchange, National Central Library, Nanking.

*CZECHOSLOVAKIA: Bureau des Échanges Internationaux, Bibliotheque de l'Assemblee Nationale, Prague 1–100.

*DENMARK: Institut des Échanges Internationaux, Bibliotheque Royale, Copenhagen K.

EGYPT: Government Press, Publications Office, Bulaq, Cairo.

FINLAND: Delegation of the Scientific Societies of Finland, Kasängatan 24, Helsinki.

*FRANCE: Service des Échanges Internationaux, Bibliotheque Nationale, 58 Rue de Richlieu, Paris.

GERMANY: Amerika-Institut, Universitätstrasse 8, Berlin, N. W. 7.

GREAT BRITAIN AND IRELAND: Wheldon & Wesley, 721 North Circular Road, Willesden, London, N. W. 2.

HUNGARY: Hungarian Libraries Board, Ferenciektere 5, Budapest, IV.

INDIA: Superintendent of Government Printing and Stationery, Bombay.

*ITALY: Ufficio delgi Scambi Internazionali, Ministero della Publica Istruxione, Rome.

JAPAN: International Exchange Service, Imperial Library of Japan, Uyeno Park, Tokyo.

LATVIA: Service des Échanges Internationaux, Bibliothèque d'État de Lettonie, Riga.

NETHERLANDS: International Exchange Bureau of the Netherlands, Royal Library, The Hague.

NEW SOUTH WALES: Public Library of New South Wales, Sydney.

NEW ZEALAND: General Assembly Library, Wellington.

NORWAY: Service Norvégien des Échanges Internationaux, Bibliothèque de l'Université Royale, Oslo.

PALESTINE: Jewish National and University Library, Jerusalem.

POLAND: Service Polonais des Échanges Internationaux, Bibliothèque Nationale, Warsaw.

PORTUGAL: Secção de Trocas Internacionais, Biblioteca Nacional, Lisbon.

QUEENSLAND: Bureau of Exchanges of International Publications, Chief Secretary's Office, Brisbane.

RUMANIA: Ministère de la Propagande Nationale, Service des Échanges Internationaux, Bucharest.

SOUTH AUSTRALIA: South Australian Government Exchanges Bureau, Government Printing and Stationery Office, Adelaide.

SPAIN: Junta de Intercambio y Adquisición de Libros y Revista para Bibliotecas Públicas, Ministerio de Educación Nacional, Avenida Calvo Sotelo 20, Madrid.

SWEDEN: Kungliga Biblioteket, Stockholm.

*SWITZERLAND: Service Suisse des Échanges Internationaux, Bibliothéque Centrale Fédérale, Palais Fédérale, Berne..

TASMANIA: Secretary to the Premier, Hobart.

TURKEY: Ministry of Education, Department of Printing and Engraving, Istanbul.

UNION OF SOUTH AFRICA: Government Printing nad Stationery Office, Cape Town, Cape of Good Hope.

UNION OF SOVIET SOCIALIST REPUBLICS: International Book Exchange Department, Society for Cultural Relations with Foreign Countries, Moscow, 56.

VICTORIA: Public Library of Victoria, Melbourne.

WESTERN AUSTRALIA: Public Library of Western Australia, Perth.

YUGOSLAVIA: Section des Échanges Internationaux, Ministère des Affaires Étrangères, Belgrade.

Frank E. Gass, correspondence clerk, who had been for several years Acting Chief Clerk of Exchanges, retired on June 30, after almost 60 years of service. Mr. Gass was appointed as messenger on August 1, 1886, and retired in March of 1941. When the manpower situation became acute in 1942 Mr. Gass returned to the Exchanges to serve during the war.

D. G. Williams was appointed as Chief Clerk on February 25.

Carl E. Hellyer, on January 11, was transferred from the guard force to the position of shipping clerk.

Glenn P. Shephard, on March 4, was transferred from the Freer Gallery of Art to the Exchanges and detailed to the Government Document Room.

Harold Peacock, after honorable discharge from the Signal Corps of the United States Army, was employed by the Institution on April 2, and detailed to the incoming mail room in charge of records and geographic distribution.

Respectfully submitted.

H. W. DORSEY, *Acting Chief.*

Dr. A. WETMORE,
Secretary, Smithsonian Institution.

APPENDIX 7

ANNUAL REPORT ON THE NATIONAL ZOOLOGICAL PARK

SIR: I have the honor to submit the following report on the operations of the National Zoological Park for the fiscal year ended June 30, 1946:

The appropriation for the regular operations of the Zoo was $310,000. A supplemental appropriation of $65,670 for salary increases authorized by Congress was also made available, making a total of $375,670. Subject to minor changes in final bills, a total of $359,453 was expended for all purposes and an unexpended balance of $16,217 remains. This balance was due to the difficulty in filling vacant positions and in obtaining materials.

Reconversion to a peacetime set-up is proving to be a slow process involving much effort in selecting, training, and orienting new employees. However, substantial progress has been made in recruiting personnel, although a number of vacancies still exist including some in skilled positions which could not be quickly filled. The additional manpower taken on was largely offset by reduction in working hours from 48 to 44 or 40 hours a week. As rapidly as possible, all units of the organization are being put on the 40-hour week.

The problem of obtaining materials such as building supplies and others used in the maintenance of structures has continued to be very difficult. Indeed, some supplies have been more difficult to obtain than they were during the wartime. It has nevertheless been possible to improve some of the structures in the Park and to do some clean-up work that had been neglected during the war. Therefore, by the close of the fiscal year there was a perceptible improvement in the general conditions throughout the entire establishment.

NEEDS OF THE ZOO

A small addition to the personnel is needed to enable the Zoo to carry on the work in an efficient manner and permit employees to take the leave to which they are legally entitled. The Zoo has been undermanned throughout the entire period of its existence, and with the adoption of the 40-hour week, the situation has been particularly acute.

Of no less importance is the need for new buildings to replace antiquated, dilapidated structures that are still used to house animals.

Preliminary planning has been taken up with the Public Works Administration for construction of these buildings when economic conditions justify.

A great deal of general maintenance and improvement work must be done to restore the Park and structures to a presentable condition. With a moderate increase in personnel the improvements can be gradually effected as materials become available.

VISITORS

With the removal of the ban on pleasure driving and in line with the general increase in traveling, there has been a marked increase in number of visitors, particularly those from more distant States, as well as in traveling groups and school groups.

ESTIMATED NUMBER OF VISITORS FOR FISCAL YEAR 1946

July (1945)	169,600	February	129,950
August	271,000	March	215,900
September	247,700	April	381,137
October	264,000	May	169,700
November	151,100	June	260,900
December	42,850		
January (1946)	68,500	Total	2,372,337

The attendance for the fiscal year 1945 was given in the last annual report as 2,355,514, whereas it should have been 2,107,084. Therefore, the actual increase in attendance in 1946 is 265,253.

NUMBER OF GROUPS FROM SCHOOLS

	Number of groups	Number in groups		Number of groups	Number in groups
Alabama	1	17	New Jersey	21	1,376
Connecticut	3	140	New York	8	957
Delaware	5	210	North Carolina	15	700
District of Columbia	60	2,719	Ohio	21	551
Georgia	12	319	Pennsylvania	104	4,024
Illinois	1	34	South Carolina	19	599
Kentucky	4	173	Tennessee	6	236
Maine	4	246	Virginia	115	5,795
Maryland	172	10,829	West Virginia	9	513
Massachusetts	8	488			
Michigan	3	84	Total	592	30,062
New Hampshire	1	52			

About 2 p. m. each day the cars then parked in the Zoo are counted by the Zoo police and listed according to the State, Territory, or country from which they came. This is, of course, not a census of cars coming to the Zoo but is valuable in showing the percentage of attend-

ance by States of people in private automobiles. The tabulation for the fiscal year 1946 is as follows:

	Percent		Percent
Washington, D. C	27.7	Ohio	1.6
Maryland	26.2	North Carolina	1.5
Virginia	10.7	New Jersey	1.3
Pennsylvania	3.9	Massachusetts	1.09
New York	2.9	Florida	1.05

The cars that made up the remaining 22.06 percent came from every one of the remaining States, as well as from the following Territories and countries: Alaska, Alberta, British Columbia, Canal Zone, Cuba, Mexico, New Brunswick, Nova Scotia, Ontario, Peru, Philippine Islands, Prince Edward Island, Puerto Rico, and Quebec.

It is well known that District of Columbia, Maryland, and Virginia cars bring to the Zoo many people from other parts of the United States and of the world, but no figures are available on which to base percentages.

THE EXHIBITS

The total number of individual animals and the different kinds of animals the Zoo has been able to maintain during the war has not declined as much as was anticipated, although the variety of rare, unusual, or especially interesting animals has been reduced, the reduction being offset in part by more of the commoner creatures. At the beginning of the war, when it appeared that Washington might be bombed, the Zoo disposed of its venomous snakes. Later, when the danger of bombing was over, several lots of the interesting pit viper known as habu (*Trimeresurus flavoviridis*) were kept for the Army Medical Corps which was using them in connection with some of their studies.

As rapidly as possible under present conditions the Zoo is endeavoring to build up the collection to the prewar standard. Because of restrictions on transportation few live animals are being brought into this country, but it is anticipated that this condition will gradually improve.

The Park's collection of alligators, crocodiles, and caimans is outstanding in that it includes 11 different species which are listed later in this report.

The birth of a baby Arabian oryx (*Oryx leucoryx*) was highly gratifying, but unfortunately after a few days the little one died, although it seemed to be in perfect condition and there was no clue as to the cause of its death.

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Other rarities such as the pigmy galago or "bush baby," pottos, and burrowing pythons were received directly from West Africa, rare frogs were flown from South America and Panama, two pairs of quetzals were received from Costa Rica and several cocks-of-the-rock from South America. From the New York Zoological Society the Park received three very large Galapagos tortoises that had been collected while young many years ago and raised in Florida. Small and attractive cage birds, not imported during the war, are coming in again, and a considerable number of species have been added to the collection.

ACQUISITION OF SPECIMENS

Additions of specimens of the Zoo collection were by gifts, deposits, purchase, and births or hatchings.

DEPOSITORS AND DONORS AND THEIR GIFTS

Adams, Donald, Washington, D. C., 2 Pekin ducks.
Alexander, W. F., Silver Spring, Md., 4 Pekin ducks.
Allentuck, Lester, Washington, D. C., Philippine macaque.
Aquarium, Department of Commerce, Washington, D. C., alligator.
Ballou, George, Bethesda, Md., bassariscus, ribbon snake, 4 racers, 4 rattlesnakes.
Bandy, Billy, Wayne, Maine, 30 garter snakes.
Beck, J. S., Washington, D. C., snapping turtle.
Bernstein, Eddie, Washington, D. C., white-throated capuchin.*
Bessinger, J. M., Washington, D. C., 4 Cumberland terrapins.
Bianco, Mrs. L. O., Washington, D. C., Pekin duck.
Botts, L. J., Washington, D. C., barred owl.
Botts, Max, Hampton, Va., green guenon.
Bowen, Felix, Bethesda, Md., capuchin.*
Bozeivich, Lucal, Berwyn, Md., 2 goats.
Breeding, Charles R., Washington, D. C., 2 Pekin ducks.
Brill, W. J., Jr., Washington, D. C., Cooper's hawk.*
Brown, Col. F. Q., Bethesda, Md., brown-cheeked parrot.
Buck, Congressman Ellsworth B., Washington, D. C., 45 frogs.*
Busey, Bill, Washington, D. C., Pekin duck.
Capley, J. B., Baltimore, Md., green guenon.
Carmichael, Michel, Washington, D. C., 2 Pekin ducks.
Carr, Commander B. L., Washington, D. C., snake-head fish.
Carter, Dr. Hill, Washington, D. C., great horned owl.*
Casbarian, James P., Washington, D. C., great horned owl.
Caspar, J. A., Washington, D. C., green guenon.
Chapman, Mr. and Mrs. Otto, Silver Spring, Md., whistling swan.
Chick, W. J., Jr., and Fowler, J. A., National Park Service, Washington, D. C., hog-nosed snake.
Cohen, Mrs. Roger, Chevy Chase, Md., 5 guinea pigs, 25 mice.
Colburn, Norman C., Washington, D. C., 6 rabbits.
Cooke, Lt. Jay, Baltimore, Md., 50 xenopus frogs.*

*Deposits.

Cookston, Maj. R. E., Lakewood, Ohio, yellow-headed parrot.*
Cooper, Suzanne T., Washington, D. C., 2 barbs, 3 zebra fish, 2 South American catfish.
Crenshaw, Joel, Arlington, Va., Pekin duck.
Denis, Armand, Dania, Fla., green mamba, black mamba.
District of Columbia Health Department, Washington, D. C., 3 rhesus monkeys.*
District of Columbia Police, through Officer E. M. Brown, Washington, D. C., black-crowned night heron.
Duncan, C. H., Greenbelt, Md., 2 Pekin ducks.
Earnest, E. P., Washington, D. C., black widow spider.
Erlanger, Arlene, Washington, D. C., palm tanager, gouldian finch.
Ewart, Jack, Washington, D. C., red coatimundi.*
Fairchild, Dr. Graham, Gorgas Memorial Library, Canal Zone, 3 frogs.
Faller, Erwin H., Washington, D. C., corn snake.
Ford, Robert W., Alexandria, Va., black vulture.
Garret, J., Rappahannock Academy, Va., red fox.
Gatti, Stephen, Washington, D. C., great horned owl.
Gleason, Martin A., Washington, D. C., king snake.
Gould, Louise, Washington, D. C., false chameleon.
Graham, Mrs. W. W., Washington, D. C., 2 grass paroquets.*
Haakinson, E. B., Washington, D. C., garter snake.
Hall, Mrs. Frank, Washington, D. C., 2 Pekin ducks.
Hall, Mary, Alexandria, Va., 2 red squirrels.
Hamlet, John N., Washington, D. C., red salamander, 15 pine or fence lizards, 6 blue-tailed skinks, prairie falcon, black vulture, Alleghany wood rat, 3 whip-tailed lizards, scorpion.
Hanby, Mrs. B. F., Arlington, Va., yellow-headed parrot.
Harder, Mrs. Arthur, Washington, D. C., 2 ring-necked doves.
Hayes, Mrs. M. M., Washington, D. C., sparrow hawk.
Headley, Mrs. Wharton, Kinsale, Va., bald eagle.
Helfrick, W. G., Washington, D. C., sparrow hawk.
Hohlen, Mae, Washington, D. C., sparrow hawk.
Hottel, W. H., Tegucigalpa, Honduras, long-tailed spotted cat.
Hugg, Mary, Washington, D. C., alligator.
Humphrey, Don, Washington, D. C., barn owl.
Huppman, Louis B., Baltimore, Md., scaup.
Hust, Gye, Washington, D. C., Pekin duck.
Ingham, Rex, Ruffin, N. C., scarlet king snake, coatimundi,* bare-eyed cockatoo.*
Jones, Cullen, Cheverly, Md., red salamander.
Jones, Henry J., Bethesda, Md., Jersey cow.
Jones, William, Washington, D. C., raccoon.
Katsuranus, Joseph, Washington, D. C., alligator.
Kelley, James Ford, Jr., Silver Spring, Md., opossum.
Kelley, W. J., Silver Spring, Md., opossum.
Knudtsen, Einar B., Baltimore, Md., 2 water snakes.
Lane, John G., Washington, D. C., skunk.
LaVarre, William, Washington, D. C., 2 American crows.
Lepphard, Charles, Washington, D. C., fence lizard.
Link, Cornelius, Washington, D. C., chicken snake.
Lond, Mrs. Wendell, Washington, D. C., 3 Pekin ducks.

*Deposits.

Lynch, Mrs. J. O., Bethesda, Md., Pekin duck.
Major, Frederick G., Arlington, Va., 4 horned lizards.
Mann, Mrs. C. R., Washington, D. C., tufted titmouse.
Mannix, Mrs. Dan, Washington, D. C., red fox.
Mannix, Lieut. D. P., Washington, D. C., bald eagle, rabbit.
Mayer, Lieut. John, Washington, D. C., sparrow hawk.
McCarthy, F., Washington, D. C., sparrow hawk.
McLanahan, Duer, Washington, D. C., Pekin duck.
Medical Corps, U. S. Army, 31 habu vipers, 3 water snakes, akamatah.
Meems Brothers and Ward, Long Island, New York, 2 Cape cobras.
Meikle, Mrs. J. C., Washington, D. C., grass paroquet.
Melvin Dairy, Washington, D. C., northern porcupine.
Meredith, Florence, Arlington, Va., double yellow-headed parrot.
Miles, Jay, Takoma Park, Md., white squirrel.
Millard, C. C., Washington, D. C., 2 rabbits.
Minker, H. L., Washington, D. C., Pekin duck.
Morgan, David, Bethesda, Md., red-shouldered hawk.*
Needham, P. H., Washington, D. C., Pekin duck.
Neri, Joseppe, Washington, D. C., golden pheasant.
Netherland, Frank, Kenwood, Md., 2 Pekin ducks.
Newill, Dr. D. S., Connellsville, Pa., hybrid jungle fowl, gray jungle fowl.*
New York Zoological Society, through John TeeVan, 3 Galapagos tortoises.*
Nida, Robert, Washington, D. C., sparrow hawk.
O'Dwyer, Arthur, Washington, D. C., horned lizard.
Old, W. E., Williamston, N. C., 5 DeKay's snakes, 4 blue-tailed skinks, marbled salamander, 2 gray frogs, milliped, 10 ground skinks.
Parker, Harry Lamont, Montevideo, Uruguay, 30 Stelzner's frogs.
Penney, Mrs., Colesville, Md., 2 raccoons.
Phillips, C. E., Kensington, Md., Pekin duck.
Poiley, S. M., National Institute of Health, Washington, D. C., 4 meadow mice.
Preston, P. D., Silver Spring, Md., canary.
Putziger, Bernard, Arlington, Va., 2 Pekin ducks.
Pyle, George L., Arlington, Va., oppossum and 8 young.
Rafferty, J. P., Arlington, Va., 2 alligators.
Randall, H. W., Washington, D. C., Florida diamond-backed rattlesnake, cotton-mouthed moccasin, black snake, western bull snake, pilot black snake.
Reamy, J. L., Washington, D. C., 2 rabbits.
Redfield, David, Washington, D. C., chipmunk.
Rehe, Mrs., Arlington, Va., Pekin duck.
Richards, Henry, Washington, D. C., white-throated capuchin.*
Runnels, Ormond, Arlington, Va., blue jay.
Santlemann, Mrs. W. F., Arlington, Va., 2 Pekin ducks.
Schmid, Ed, Washington, D. C., 50 tiger salamanders.
Schneider, Mildred, Washington, D. C., 3 rabbits.
Scott, Mary, Arlington, Va., Pekin duck.
Shaw, H. L., Baltimore, Md., Hamadryas baboon.*
Shelby, Lizzie, Hillside, Md., bull snake, 3 hog-nosed snakes, 2 garter snakes, 2 water snakes, green racer.
Smith, David A., Chevy Chase, Md., mallard duck.
Smith, Douglas P., Bethesda, Md., rabbit.
Smith, Mr. and Mrs. Leslie, Vienna, Va., 6 mallard ducks, 2 Pekin ducks, skunk.

*Deposits.

Smith, Spencer, Orange, Fla., 2 gray foxes.
Stabler, Albert, Jr., Spencerville, Md., ground hog, red jungle fowl.
Steele, Mrs. S. F., Chevy Chase, Md., 2 Pekin ducks.
Stiller, Bertram, Washington, D. C., flying squirrel.
Tate, R. D., Seat Pleasant, Md., red fox.
Theadore, Mrs. John, Washington, D. C., rabbit.
Thomas, Miss, Bradly, Va., Pekin duck.
Thomas, Maj. W. B. S., U. S. Army, Mexican water snake, 3 worm snakes, 2 lizards, 9 akamatahs.
Thompson's Dairy, Washington, D. C., horned lizard.
Trueblood, Winslow, Cohasset, Mass., wood turtle.
Turner, Bill, Westwood, Prince Georges County, Md., duck hawk.
Ulke, Dr. Titus, Washington, D. C., spade-footed toad.
Vermillion, Mrs., Washington, D. C., skunk.*
Wesley, Rhoda, Washington, D. C., red salamander, opossum.
Westburg, Leroy, Washington, D. C., hog-nosed snake.
White, Vivian, Washington, D. C., blue-fronted parrot.
Woolf, D. O., Washington, D. C., 2 black widow spiders.
Wyatt, Archie, Washington, D. C., guinea pig.

*Deposits.

BIRTHS AND HATCHINGS

MAMMALS

Scientific name	*Common name*	*Number*
Ammotragus lervia	Aoudad	5
Axis axis	Axis deer	2
Bibos gaurus	Gaur	1
Bison bison	American bison	2
Bos indicus	Zebu	1
Bos taurus	Park cattle	1
Camelus bactrianus	Bactrian camel	1
Cercopithecus aethiops sabaeus	Green guenon	1
Cervus canadensis	American elk	1
Chinchilla chinchilla	Chinchilla	3
Choeropsis liberiensis	Pigmy hippopotamus	1
Cynomys ludovicianus	Plains prairie dog	15
Dama dama	Fallow deer	2
Dama dama	White fallow deer	4
Dasyprocta punctata	Spectacled agouti	1
Felis tigris	Bengal tiger	6
Hippopotamus amphibius	Hippopotamus	1
Odocoileus virginianus	Virginia deer	1
Oryx leucoryx	Arabian oryx	1
Ovis aries	Woolless sheep	2
Ovis europaeus	Mouflon	1
Sika sika	Sika deer	1
Synceros caffer	African buffalo	1
Thalarctos maritimus	Polar bear	1
Thalarctos maritimus×*Ursus middendorffi*	Hybrid bear	2

BIRTHS AND HATCHINGS—continued

BIRDS

Scientific name	*Common name*	*Number*
Anas platyrhynchos	Mallard duck	15
Branta canadensis	Canada goose	2
Larus novaehollandiae	Silver gull	3
Taeniopygia castanotis	Zebra finch	11
Taeniopygia castanotis	Zebra finch (gray phase)	3
Turtur risorius	Ring-necked dove	17

REPTILES

Epicrates cenchris	Rainbow boa	23
Gekko gecko	Gecko	2

AMPHIBIANS

Pipa americana	Surinam toad	26

ANIMALS IN THE NATIONAL ZOOLOGICAL PARK, JUNE 30, 1946

MAMMALS

MARSUPIALIA

Scientific name	*Common name*	*Number*
Didelphiidae:		
Didelphis virginiana	Opposum	11
Phalangeridae:		
Petaurus breviceps	Lesser flying phalanger	2
Petaurus norfolcensis	Australian flying phalanger	2
Macropodidae:		
Dendrolagus inustus	New Guinea tree kangaroo	2
Thylogale eugenii	Dama wallaby	4
Phascolomyidae:		
Vombatus ursinus	Flinders Island wombat	1

CARNIVORA

Felidae:		
Acinonyx jubatus	Cheetah	1
Felis chaus	Jungle cat	1
Felis concolor	Puma	5
Felis concolor patagonica	Patagonian puma	1
Felis concolor × *Felis concolor patagonica*	Hybrid North American × South American puma	4
Felis leo	Lion	5
Felis onca	Jaguar	4
	Black jaguar	2
Felis pardalis	Ocelot	2
Felis pardus	Indian leopard	3
	Black Indian leopard	2
Felis temmenckii	Golden cat	2
Felis tigris	Bengal tiger	2
Felis tigris longipilis	Siberian tiger	1

MAMMALS—continued

CARNIVORA—continued

Scientific name	*Common name*	*Number*
Felidae—Continued		
Felis tigris sumatrae	Sumatran tiger	3
Lynx rufus	Bay lynx	2
Lynx uinta	Bob cat	1
Oncifelis geoffroyi	Geoffroy's cat	4
Oncilla pardinoides	Lesser tiger cat	2
Viverridae:		
Arctictis binturong	Binturong	1
Civettictis civetta	African civet	1
Myonax sanguineus	Dwarf civet	1
Nandinia binotata	West African palm civet	1
Paradoxurus hermaphroditus	Small-toothed palm civet	2
Hyaenidae:		
Crocuta crocuta germinans	East African spotted hyena	1
Canidae:		
Canis latrans	Coyote	1
Canis latrans × *familiaris*	Coyote and dog hybrid	1
Canis lupus nubilus	Plains wolf	2
Canis niger rufus	Texas red wolf	3
Cuon javanicus sumatrensis	Sumatran wild dog	1
Dusicyon culpaeus	South American fox	1
Dusicyon (Cerdocyon) thous	South American fox	1
Nyctereutes procyonoides	Raccoon dog	2
Urocyon cinereoargenteus	Gray fox	5
Vulpes fulva	Red fox	10
Procyonidae:		
Nasua narica	Coatimundi	11
Nasua nasua	Red coatimundi	1
Nasua nelsoni	Nelson's coatimundi	2
Potos flavus	Kinkajou	7
Procyon lotor	Raccoon	6
	Black raccoon	8
	Raccoon (albino)	1
Bassariscidae:		
Bassariscus astutus	Ring-tail or cacomistle	1
Mustelidae:		
Grison sp	Grison	1
Grisonella huronax	Grison	1
Lutra canadensis vaga	Florida otter	1
Lutra (Micraonyx) cinerea	Small-clawed otter	1
Martes (Lamprogale) flavigula henricii	Asiatic marten	1
Meles meles leptorynchus	Chinese badger	1
Mellivora capensis	Ratel	1
Mephitis mephitis nigra	Skunk	11
Mustela eversmanni	Ferret	1
Mustela frenata noveboracensis	Weasel	1
Tayra barbara barbara	White tayra	2
Tayra barbara senilis	Gray-headed tayra	1

MAMMALS—continued

CARNIVORA—continued

Scientific name	*Common name*	*Number*
Ursidae:		
Euarctos americanus	Black bear	4
Euarctos thibetanus	Himalayan bear	1
Helarctos malayanus	Malay or sun bear	1
Melursus ursinus	Sloth bear	1
Thalarctos maritimus	Polar bear	3
Thalarctos maritimus × *Ursus middendorffi*	Hybrid bear	4
Ursus arctos	European brown bear	1
Ursus arctos meridionalis	Caucasas brown bear	1
Ursus gyas	Alaskan Pensinsula bear	3
Ursus middendorffi	Kodiak bear	3
Ursus sitkensis	Sitka brown bear	3

PINNIPEDIA

Otariidae:		
Zalophus californianus	Sea lion	3
Phocidae:		
Phoca vitulina richardii	Pacific harbor seal	2

PRIMATES

Lemuridae:		
Galago demidovii	Least galago	1
Lemur mongoz	Mongoose lemur	2
Perodicticus potto	Potto	3
Callitrichidae:		
Callithrix jacchus	White-tufted marmoset	1
Leontocebus rosalia	Lion-headed or golden marmoset	1
Oedipomidas geoffroyi	Geoffroy's marmoset	1
Cebidae:		
Aotus trivirgatus	Douroucouli or owl monkey	4
Ateles geoffroyi vellerosus	Spider monkey	9
Cebus apella	Gray capuchin	5
Cebus capucinus	White-throated capuchin	3
Cebus fatuellus	Weeping capuchin	2
Lagothrix lagotricha	Woolly monkey	1
Cercopithecidae:		
Cercocebus albigularis	Blue monkey	1
Cercocebus aterrimus	Black-crested mangabey	1
Cerocebus torquatus atys	Sooty mangabey	2
Cercocebus torquatus lunulatus	White-crowned mangabey	1
Cercopithecus aethiops pygerythrus	Vervet guenon	2
Cercopithecus aethiops sabaeus	Green guenon	8
Cercopithecus cephus	Moustached guenon	2
Cercopithecus diana	Diana monkey	3
Ceropithecus diana roloway	Roloway monkey	2
Cercopithecus neglectus	De Brazza's guenon	1
Ceropithecus nictitans petaurista	Lesser white-nosed guenon	2

MAMMALS—continued

PRIMATES—continued

Scientific name	*Common name*	*Number*
Cercopithecidae—Continued		
Cercopithecus sp	West African guenon	1
Erythrocebus patas	Patas monkey	1
Gymnopyga maurus	Moor monkey	1
Macaca irus mordax	Javan macaque	4
Macaca mulatta	Rhesus monkey	8
Macaca nemestrina	Pig-tailed monkey	2
Macaca philippinensis	Philippine macaque	5
Macaca silene	Wanderoo monkey	2
Macaca sinica	Toque or bonnet monkey	1
Macaca speciosa	Red-faced macaque	1
Mandrillus sphinx	Mandrill	1
Papio comatus	Chacma	1
Hylobatidae:		
Hylobates agilis	Sumatran gibbon	1
Hylobates agilis × *Hylobates lar pileatus*	Hybrid gibbon	1
Hylobates hoolock	Hoolock gibbon	1
Hylobates lar pileatus	Black-capped gibbon	1
Symphalangus syndactylus	Siamang gibbon	1
Pongidae:		
Pan troglodytes	Chimpanzee	2
Pan troglodytes verus	West African chimpanzee	2
Pongo pygmaeus	Bornean orangutan	1
Pongo pygmaeus abelii	Sumatran orangutan	2

RODENTIA

Sciuridae:		
Callosciurus finlaysoni	Lesser white squirrel	1
Citellus beecheyi douglasii	Douglas ground squirrel	4
Citellus tridecemlineatus	13-lined ground squirrel	1
Cynomys ludovicianus	Plains prairie dog	40
Funisciurus leucostigma	West African bush squirrel	3
Glaucomys volans	Flying squirrel	14
Heliosciurus rufobrachium maculatus	West African sun squirrel	1
Marmota monax	Woodchuck or ground hog	5
Ratufa indica	Giant Indian squirrel	1
Sciurus aberti	Abert's squirrel	1
Sciurus niger neglectus	Fox squirrel	1
Tamias striatus	Eastern chipmunk	2
Heteromyidae:		
Dipodomys ordii	Ord kangaroo rat	3
Cricetidae:		
Cricetomys gambianus	Gambia pouched rat	1
Mesocricetus auratus	Golden hamster	4
Microtus magister	Meadow mouse	2
Neotoma floridana attwateri	Round-tailed wood rat	2
Neotoma pennsylvanica	Allegheny wood rat	1
Oryzomys palustris	Rice rat	2
Peromyscus crinitus auripectus	Golden-breasted mouse	1

MAMMALS—continued

RODENTIA—continued

Scientific name	*Common name*	*Number*
Cricetidae—Continued		
Peromyscus leucopus	White-footed or deer mouse	1
Sigmodon hispidus	Cotton rat	3
Muridae:		
Mus musculus	White and other domestic mice	13
Hystricidae:		
Acanthion brachyurum	Malay porcupine	3
Atherurus africanus	West African brush-tailed porcupine	3
Thecurus crassispinis sumatrae	Thick-spined porcupine	1
Myocastoridae:		
Myocastor coypus	Coypu	7
Cuniculidae:		
Cuniculus paca virgatus	Central American paca	1
Dasyproctidae:		
Dasyprocta prymnolopha	Agouti	2
Dasyprocta punctata	Speckled agouti	4
Chinchillidae:		
Chinchilla chinchilla	Chinchilla	8
Caviidae:		
Cavia porcellus	Guinea pig	3
Dolichotis patagona	Patagonian cavy	1

LAGOMORPHA

Leporidae:		
Oryctolagus cuniculus	Domestic rabbits	5
Sylvilagus floridanus	Eastern cottontail rabbit	1

ARTIODACTYLA

Bovidae:		
Ammotragus lervia	Aoudad	15
Anoa fergusoni	Mountain anoa	1
Bibos gaurus	Gaur	3
Bison bison	American bison	13
	Albino bison	1
Bos indicus	Zebu	4
Bos taurus	Domestic cow (Jersey)	1
Bos taurus	Texas longhorn steer	1
Bos taurus	West Highland or Kyloe cattle	3
Bos taurus	British Park cattle	5
Bubalus bubalis	Water buffalo	2
Capra hircus	Domestic goat	1
Capra sibirica	Ibex	1
Cephalophus maxwellii	Maxwell's duiker	1
Cephalophus niger	Black duiker	1
Cephalophus nigrifrons	Black-fronted duiker	2
Hemitragus jemlahicus	Tahr	5
Oreotragus oreotragus	South African klipspringer	1
Oryx beisa annectens	Ibean beisa oryx	1

MAMMALS—continued

ARTIODACTYLA—continued

Scientific name	*Common name*	*Number*
Bovidae—Continued		
Oryx leucoryx	Arabian oryx	3
Ovis aries	Woolless or Barbadoes sheep	1
Ovis europaea	Mouflon	4
Poephagus grunniens	Yak	6
Pseudois nayaur	Bharal or blue sheep	1
Sus scrofa	Wild boar	2
Syncerus caffer	African buffalo	2
Taurotragus oryx	Eland	3
Cervidae:		
Axis axis	Axis deer	5
Cervus canadensis	American elk	5
Cervus elaphus	Red deer	4
Cervus nippon	Japanese deer	3
Cervus nippon manchuricus	Dybowsky deer	2
Dama dama	Fallow deer	9
	White fallow deer	11
Odocoileus virginianus	Virginia deer	5
Giraffidae:		
Giraffa camelopardalis	Nubian giraffe	4
Giraffa reticulata	Reticulated giraffe	1
Camelidae:		
Camelus bactrianus	Bactrian camel	3
Camelus dromedarius	Single-humped camel	1
Lama glama	Llama	2
Lama glama guanico	Guanaco	1
Lama pacos	Alpaca	2
Vicugna vicugna	Vicuna	1
Tayassuidae:		
Pecari angulatus	Collared peccary	1
Suidae:		
Babirussa babyrussa	Babirussa	2
Phacochoerus aethiopicus aeliani	East African wart hog	3
Hippopotamidae:		
Choeropsis liberiensis	Pigmy hippopotamus	5
Hippopotamus amphibius	Hippopotamus	2

PERISSODACTYLA

Equidae:		
Equus burchellii antiquorum	Chapman's zebra	2
Equus grevyi	Grevy's zebra	1
Equus grevyi×caballus	Zebra-horse hybrid	1
Equus kiang	Asiatic wild ass or kiang	1
Equus onager	Onager	1
Equus przewalskii	Mongolian wild horse	3
Equus zebra	Mountain zebra	1
Tapiridae:		
Acrocodia indica	Asiatic tapir	2
Tapirus terrestris	South American tapir	1

MAMMALS—continued

PERISSODACTYLA—continued

Scientific name	Common name	Number
Rhinocerotidae:		
Rhinoceros unicornis	Great Indian one-horned rhinoceros	1

PROBOSCIDAE

Elephantidae:		
Elephas maximus sumatranus	Sumatran elephant	1
Loxodonta africana oxyotis	African elephant	1

EDENTATA

Choloepodidae:		
Choloepus didactylus	Two-toed sloth	3
Dasypodidae:		
Chaetophractus villosus	Hairy armadillo	1
Euphractus sexcinctus	Six-banded armadillo	2
Myrmecophagidae:		
Myrmecophaga tridactyla	Giant anteater	1

BIRDS

STRUTHIONIFORMES

Struthionidae:		
Struthio camelus	Ostrich	2

RHEIFORMES

Rheidae:		
Rhea americana	Common rhea	3

CASUARIIFORMES

Casuariidae:		
Casuarius bennetti papuanus	Papuan Cassowary	1
Casuarius casuarius aruensis	Aru cassowary	1
Casuarius uniappendiculatus occipitalis	Island cassowary	1
Casuarius uniappendiculatus uniappendiculatus	One-wattled cassowary	1
Dromiceiidae:		
Dromiceius novaehollandiae	Common emu	2

SPHENISCIFORMES

Spheniscidae:		
Aptenodytes forsteri	Emperor penguin	3
Spheniscus demersus	Jackass penguin	4
Spheniscus humboldti	Humboldt penguin	2

TINAMIFORMES

Tinamidae:		
Eudromia elegans	Crested tinamou or martineta	1

BIRDS—continued

PELECANIFORMES

Scientific name	*Common name*	*Number*
Pelecanidae:		
Pelecanus conspicillatus	Australian pelican	2
Pelecanus erythrorhynchus	White pelican	5
Pelecanus occidentalis	Brown pelican	5
Pelecanus onocrotalus	European pelican	2
Phalacrocoracidae:		
Phalacrocorax auritus albociliatus	Farallon cormorant	1
Fregatidae:		
Fregata ariel	Lesser frigate bird	1

CICONIIFORMES

Ardeidae:		
Ardea herodias	Great blue heron	2
Ardea occidentalis	Great white heron	1
Egretta thula	Snowy egret	5
Florida caerulea	Little blue heron	1
Hydranassa tricolor ruficollis	Louisiana heron	2
Notophoyx novaehollandiae	White-faced heron	1
Nyctanassa violacea cayennensis	South American yellow-crowned night heron	1
Nycticorax nycticorax naevius	Black-crowned night heron	20
Cochleariidae:		
Cochlearius cochlearius	Boatbill heron	1
Ciconiidae:		
Dissoura episcopus	Woolly-necked stork	1
Ibis cinereus	Malay stork	2
Leptoptilus crumeniferus	Marabou	1
Leptoptilus dubius	Indian adjutant	1
Leptoptilus javanicus	Lesser adjutant	2
Mycteria americana	Wood ibis	1
Threskiornithidae:		
Ajaia ajaja	Roseate spoonbill	4
Guara alba	White ibis	8
Guara alba × *G. rubra*	Hybrid white and scarlet ibis	1
Guara rubra	Scarlet ibis	1
Threskiornis aethiopica	Sacred ibis	1
Threskiornis melanocephala	Black-headed ibis	4
Threskiornis spinicollis	Straw-necked ibis	2
Phoenicopteridae:		
Phoenicopterus chilensis	Chilean flamingo	1
Phoenicopterus ruber	Cuban flamingo	3

ANSERIFORMES

Anhimidae:		
Chauna chavaria	White-cheeked screamer	1
Chauna cristata	Crested screamer	7

BIRDS—continued

ANSERIFORMES—continued

Scientific name	Common name	Number
Anatidae:		
Aix sponsa	Wood duck	6
Anas brasiliensis	Brazilian teal	2
Anas domestica	Pekin duck	25
Anas platyrhynchos	Mallard duck	61
Anas rubripes	Black duck	7
Anser albifrons	American white-fronted goose	1
Anser cinereus domestica	Toulouse goose	2
Anseranus semipalmata	Australian pied goose	2
Branta canadensis	Canada goose	37
Branta canadensis occidentalis	White-cheeked goose	26
Branta canadensis × *Chen caerulescens*	Hybrid Canada goose × blue goose	2
Branta hutchinsii	Hutchin's goose	4
Branta hutchinsii minima	Cackling goose	8
Cairina moschata	Muscovy duck	16
Cereopsis novaehollandiae	Cape Barren goose	1
Chen atlantica	Snow goose	2
Chen caerulescens	Blue goose	2
Chenopis atrata	Black swan	4
Chloephaga leucoptera	Magellan goose	1
Cygnopsis cygnoides	Domestic goose	2
Cygnus columbianus	Whistling swan	3
Cygnus melancoriphus	Black-necked swan	1
Cygnus olor	Mute swan	3
Dafila acuta	Pintail	8
Dafila spinicauda	Chilean pintail	1
Dendrocygna arborea	Black-billed tree duck	3
Dendrocygna autumnalis	Black-bellied tree duck	2
Dendrocygna viduata	White-faced tree duck	4
Dendronessa galericulata	Mandarin duck	4
Mareca americana	Baldpate	1
Marila affinis	Lesser scaup	1
Marila collaris	Ring-necked duck	1
Nettion carolinense	Green-winged teal	1
Nettion formosum	Baikal teal	5
Nyroca sp	Hybrid duck	1
Nyroca americana	Red-head duck	2
Nyroca valisineria	Canvasback duck	1
Philacte canagica	Emperor goose	3
Querquedula discors	Blue-winged teal	6

FALCONIFORMES

Cathartidae:		
Cathartes aura	Turkey vulture	2
Coragyps atratus	Black vulture	2
Gymnogyps californianus	California condor	1
Vultur gryphus	Andean condor	1

BIRDS—continued

FALCONIFORMES—continued

Scientific name	*Common name*	*Number*
Accipitridae:		
Accipiter striatus velox	Sharp-shinned hawk	2
Buteo borealis	Red-tailed hawk	7
Buteo lineatus elegans	Southern red-shouldered hawk	1
Buteo lineatus lineatus	Red-shouldered hawk	1
Buteo melanoleucus	South American buzzard eagle	2
Buteo platypterus	Broad-winged hawk	1
Buteo poecilochrous	Red-backed buzzard	3
Gypohierax angolensis	Fish-eating vulture	1
Gyps rueppelli	Ruppell's vulture	1
Haliaeetus leucocephalus	Bald eagle	7
Haliastur indus	Brahminy kite	5
Harpia harpya	Harpy eagle	2
Hypomorphnus urubitinga	Brazilian eagle	1
Milvago chimango	Chimango	3
Milvus migrans parasitus	African yellow-billed kite	2
Pandion haliaetus carolinensis	Osprey or fish hawk	1
Parabuteo unicinctus	One-banded hawk	1
Torgos tracheliotus	African eared vulture	1
Falconidae:		
Cerchneis sparverius	Sparrow hawk	8
Cerchneis sparverius interaedius	South American sparrow hawk	1
Daptrius americanus	Red-throated caracara	3
Falco deiroleucus	Bat falcon	1
Falco peregrinus anatum	Duck hawk	2
Polyborus plancus	South American caracara	1

GALLIFORMES

Cracidae:		
Crax fasciolata	Crested curassow	1
Crax rubra	Panama curassow	1
Crax sclateri	Sclater's curassow	1
Mitu mitu	Razor-billed curassow	1
Phasianidae:		
Argusianus argus	Argus pheasant	2
Catreus wallichii	Cheer pheasant	2
Chrysolophus amherstiae	Lady Amherst's pheasant	1
Chrysolophus pictus	Golden pheasant	5
Colinus cristatus	Crested quail	2
Crossoptilon auritum	Blue-eared pheasant	1
Gallus sp	Bantam chicken	1
Gallus sp	Oriental silky bantam fowl	2
Gallus sp	Fighting fowl	1
Gallus sp	Long-tailed fowl	1
Gallus gallus	Red jungle fowl	2
Gallus gallus	Hybrid red jungle fowl × Bantam fowl	3
Gallus lafayetti	Ceylonese jungle fowl	1

BIRDS—continued

GALLIFORMES—continued

Scientific name	*Common name*	*Number*
Phasianidae—Continued		
Gallus lafayetii × *G. gallus*	Chicken hybrid	1
Gallus sonnerati	Gray jungle fowl	1
Gennaeus albocristatus	White-crested kaleege	2
Gennaeus nycthemerus	Silver pheasant	3
Hierophasis swinhoii	Swinhoe's pheasant	2
Lophophorus impeyanus	Himalayan impeyan pheasant	1
Pavo cristatus	Peafowl	6
Phasianus torquatus	Ring-necked pheasant	4
	White ring-necked pheasant	1
Polyplectron napoleonis	Palawan peacock pheasant	1
Syrmaticus reevesi	Reeve's pheasant	1
Numididae:		
Acryllium vulturinum	Vulturine guinea fowl	1
Numida sp	Guinea fowl	4

GRUIFORMES

Rhinochetidae:		
Rhinochetos jubatus	Kagu	1
Gruidae:		
Anthropoides virgo	Demoiselle crane	2
Balearica pavonina	West African crowned crane	2
Balearica regulorum gibbericeps	East African crowned crane	1
Grus leucauchen	White-naped crane	1
Grus leucogeranus	Siberian crane	2
Rallidae:		
Amaurornis phoenicurus	White-breasted rail	2
Aramides cayennensis	Wood rail	2
Fulica americana	American coot	8
Gallinula chloropus cachinnans	Florida gallinule	3
Gallinula chloropus orientalis	Sumatran gallinule	1
Limnocorax flavirostra	African black rail	3
Porphyrio poliocephalus	Gray-headed porphyrio	1
Cariamidae:		
Cariama cristata	Cariama or seriama	2

CHARADRIIFORMES

Haematopodidae:		
Haematopus ostralegus	European oyster catcher	1
Charadriidae:		
Belanopterus chilensis	Chilean lapwing	1
Laridae:		
Larus argentatus	Herring gull	1
Larus delawarensis	Ring-billed gull	1
Larus dominicanus	Kelp gull	2
Larus glaucescens	Galaucous-winged gull	1
Larus novaehollandiae	Silver gull	10
Glariolidae:		
Glareola pratincola	Collared pratincole	1

BIRDS—continued

COLUMBIFORMES

Scientific name	*Common name*	*Number*
Columbidae:		
Columba guinea	Triangular-spotted pigeon	1
Columba livia	Domestic pigeon	3
Columbigallina passerina	Ground dove	2
Ducula aenea	Green imperial pigeon	1
Ducula paulina	Imperial pigeon	1
Gallicolumba luzonica	Bleeding-heart dove	2
Goura cristata	Sclater's crowned pigeon	1
Goura victoria	Victoria crowned pigeon	1
Leptotila cassini	Cassin's dove	1
Leptotila rufaxilla	Scaled pigeon	1
Muscadivores paulina	Celebian imperial pigeon	1
Streptopelia chinensis	Asiatic collared dove	2
Streptopelia chinensis ceylonensis	Lace-necked or ash dove	3
Streptopelia tranquebarica	Blue-headed ring dove	2
Turtur risorius	Ring-necked dove	33
Zenaida auriculata	South America mourning dove	5
Zenaidura macroura	Mourning dove	2

PSITTACIFORMES

Psittiacidae:		
Agapornis lilianae	Peach-faced love bird	2
Agapornis pullaria	Red-faced love bird	2
Amazona aestiva	Blue-fronted parrot	1
Amazona auropalliata	Yellow-naped parrot	2
Amazona ochrocephala	Yellow-headed parrot	2
Amazona oratrix	Double yellow-headed parrot	3
Anodorhynchus hyacinthinus	Hyacinthine macaw	1
Ara ararauna	Yellow and blue macaw	1
Ara macao	Red, blue, and yellow macaw	1
Aratinga euops	Cuban conure	1
Aratinga pertinax	Gray-headed conure	1
Calyptorhynchus magnificus	Banksian cockatoo	1
Coracopsis nigra	Lesser vasa parrot	1
Cyanopsittacus spixi	Spix's macaw	1
Ducorpsis sanguineus	Bare-eyed cockatoo	2
Eclectus pectoralis	Eclectus parrot	1
Eolophus roseicapillus	Roseate cockatoo	2
Kakatoe alba	White cockatoo	2
Kakatoe ducrops	Solomon Islands cockatoo	2
Kakatoe galerita	Large sulphur-crested cockatoo	2
Kakatoe leadbeateri	Leadbeater's cockatoo	1
Kakatoe moluccensis	Great red-crested cockatoo	1
Kakatoe sulphurea	Lesser sulphur-crested cockatoo	1
Lorius domicella	Rajah lory	2
Lorius garrulus	Red lory	1

BIRDS—continued

PSITTACIFORMES—continued

Scientific name	*Common name*	*Number*
Psittacidae—Continued		
Lorius roratus	Red-sided lory	1
Melopsittacus undulatus	Grass paroquet	5
Myopsitta monachus	Quaker paroquet	1
Nandayus nanday	Nanday paroquet	1
Nestor notabilis	Kea	1
Pionites xanthomera	Amazonian caique	2
Psittacula eupatria	Red-shouldered paroquet	3
Psittacula krameri	Kramer's paroquet	2
Psittacula longicauda	Long-tailed paroquet	1

CUCULIFORMES

Cuculidae:		
Eudynamis scolopaceus	Koel	1

STRIGIFORMES

Tytonidae:		
Tyto alba pratincola	Barn owl	5
Strigidae:		
Bubo virginianus	Great horned owl	9
Ketupa ketupa	Malay fish owl	1
Nyctea nyctea	Snowy owl	1
Otus asio	Screech owl	1
Strix varia varia	Barred owl	6

TROGONIFORMES

Trogonidae:		
Pharomachrus mocino	Quetzal	3

CORACIIFORMES

Alcedinidae:		
Dacelo gigas	Kookaburra	2
Halcyon sanctus	Sacred kingfisher	1
Momotidae:		
Momotus lessoni	Motmot	1

PICIFORMES

Ramphastidae:		
Aulacorhynchus sulcatus sulcatus	Groove-billed toucanet	1
Pteroglossus aracari	Black-necked aracari	1
Pteroglossus torquatus	Aracari toucan	1
Ramphastos carinatus	Sulphur-breasted toucan	6
Ramphastos piscivorus	Toco toucan	1
Capitonidae:		
Cyanops asiatica	Red-capped barbet	1
Cyanops zeylanica	Streaked barbet	1
Megalaima zalonica	Streaked barbet	1

BIRDS—continued

PASSERIFORMES

Scientific name	*Common name*	*Number*
Cotingidae:		
Rupicola peruviana sanguinolenta	Scarlet cock-of-the-rock	1
Rupicola rupicola	Cock-of-the-rock	3
Corvidae:		
Callocitta formosa	Mexican jay	1
Cissa chinensis	Chinese cissa	2
Cissilopha yucatanica	Yucatan bluejay	4
Corvus albus	White-breasted crow	2
Corvus brachyrhynchus	American crow	8
Corvus corax principalis	Northern raven	2
Corvus cornix	Hooded crow	1
Corvus cryptoleucus	White-necked raven	1
Corvus insolens	Indian crow	3
Cyanocitta cristata	Blue jay	1
Cyanocorax chrysops	Urraca jay	1
Cyanocorax mystacalis	Moustached jay	1
Cyanopica cyana	Azure-winged pie	2
Gymnorhina hypoleuca	White-backed piping crow	1
Pica pica hudsonica	American magpie	5
Urocissa caerulea	Formosan red-billed pie	2
Urocissa occipitalis	Red-billed blue magpie	1
Paradiseidae:		
Ailuroedus crassirostris	Australian catbird	1
Ptilonorhynchus violaceus	Satin bowerbird	1
Pycnonotidae:		
Pycnonotus analis	Yellow-vented bulbul	1
Timaliidae:		
Leiothrix luteus	Pekin robin	1
Pomatorhinus erythrogenys	Scimitar babbler	1
Mimidae:		
Melanotis caerulescens	Blue catbird	1
Mimus polyglottos	Mockingbird	1
Turdidae:		
Garrulax sp	Asiatic thrush	3
Garrulax belangeri	Burmese thrush	3
Garrulax pectoralis picticollis	Chinese collared laughing thrush	1
Hylocichla mustelina	Wood thrush	1
Platycichla flavipes	Yellow-footed thrush	1
Turdus grayi	Bonaparte's thrush	1
Turdus migratorius	Eastern robin	1
Turdus rufiventris	Argentine robin	1
Sturnidae:		
Creatophora cinerea	Wattled starling	1
Galeopsar salvadorii	Crested starling	1
Gracula religiosa	Hill mynah	1
Graculipica melanoptera	White starling	1
Pastor roseus	Rosy pastor	2

BIRDS—continued

PASSERIFORMES—continued

Scientific name	*Common name*	*Number*
Sturnidae—Continued		
Sturnia malabarica	Pied mynah	2
Sturnus vulgarus	Starling	1
Temenuchus pagodarum	Black-headed mynah	2
Ploceidae:		
Diatropura procne	Giant whydah	2
Erythrura psittacea	New Caledonian parrot finch	1
Lonchura leucogastroides	Bengalee	2
Munia maja	White-headed munia	2
Munia malacca	Black-throated munia	1
Munia oryzivora	Java sparrow	5
Munia punctulatus	Rice bird or nutmeg finch	1
Ploceus baya	Baya weaver	3
Ploceus intermedius	Black-cheeked weaver	3
Poephila acuticauda	Long-tailed finch	1
Poephila gouldiae	Gouldian finch	2
Quelea sanginirostris intermedia	Southern masked weaver finch	2
Steganura paradisea	Paradise whydah	1
Taeniopygia castanotis	Zebra finch	12
Icteridae:		
Agelaius assimilis	Cuban red-winged blackbird	1
Cassiculus melanicterus	Mexican cacique	1
Gymnomystax mexicanus	Giant oriole	1
Icterus bullocki	Bullock's troupial	2
Icterus icterus	Troupial	1
Molothrus bonariensis	Shiny cowbird	1
Notiospar curaesus	Chilean blackbird	2
Trupialis defilippi	Military starling	4
Xanthocephalus xanthocephalus	Yellow-headed blackbird	6
Thraupidae:		
Calospiza cyanicollis	Blue-necked tanager	2
Chlorophonia occipitalis	Central American chlorophonia	2
Piranga bidentata	Orange tanager	1
Rhamphocelus carbo	Silver-beaked tanager	2
Ramphocelus dimidiatus	Crimson tanager	1
Ramphocelus flammigerus	Yellow tanager	4
Ramphocelus icteronotus	Yellow-rumped tanager	2
Tanagra darwini	Darwin's tanager	3
Tanagra musica	Blue-hooded euphonia	2
Thraupis cana	Blue tanager	2
Fringillidae:		
Amandava amandava	Strawberry finch	9
Carpodacus mexicanus	Mexican house finch	4
Coryphospingus cucullatus	Red-crested finch	1
Cyanocompsa argentina	Argentine blue brosbeak	2
Diuca diuca	Diuca finch	1
Junco hyemalis	Slate-colored junco	1

BIRDS—continued

PASSERIFORMES—continued

Scientific name	*Common name*	*Number*
Fringillidae—Continued		
Lophospingus pusillus	Black-crested finch	3
Melopyrrha nigra	Cuban bullfinch	1
Melospiza melodia	Song sparrow	2
Paroaria cucullata	Brazilian cardinal	2
Paroaria gularis nigro-genis	Black-eared cardinal	3
Passerella iliaca	Fox sparrow	1
Passerina amoena	Lazuli bunting	4
Passerina cyanea	Indigo bunting	2
Passerina leclancheri	Leclancher's bunting	6
Passerina versicolor	Blue bunting	2
Phrygilus alaudinos	Chilean lark finch	1
Phrygilus fruticeti	Mourning finch	2
Phrygilus gayi	Gay's gray-headed finch	1
Richmondina cardinalis	Cardinal	4
Serinus canarius	Canary	2
Sicalis flaveola	Mysto finch	1
Sicalis luteola	Saffron finch	2
Sicalis minor	Lesser yellow finch	4
Spinus uropygialis	Chilean siskin	3
Sporophila aurita	Hick's seed-eater	2
Sporophila gutturalis	Yellow-billed seed-eater	2
Tiaris olivacea	Mexican grassquit	2
Volatinia jacarini	Blue-black grassquit	1
Zonotrichia albicollis	White-throated sparrow	5
Zonotrichia capensis	Chingolo	4

REPTILES

LORICATA

Crocodylidae:		
Alligator mississipiensis	Alligator	21
Alligator sinensis	Chinese alligator	3
Caiman latirostris	Broad-snouted caiman	1
Caiman sclerops	Spectacled caiman	3
Crocodylus acutus	American crocodile	4
Crocodylus cataphractus	Narrow-nosed crocodile	1
Crocodylus niloticus	African crocodile	2
Crocodylus palustris	"Toad" crocodile	2
Crocodylus porosus	Salt-water crocodile	1
Crocodylus rhombifer	Cuban crocodile	1
Osteolaemus tetraspis	Broad-nosed crocodile	3

SAURIA

Gekkonidae:		
Gekko gecko	Gecko	2
Iguanidae:		
Anolis carolinensis	False "chameleon"	15
Crotaphytus collaris	Collared lizard	6

REPTILES—continued

SAURIA—continued

Scientific name	*Common name*	*Number*
Iguanidae—Continued		
Iguana iguana	Common iguana	1
Phrynosoma cornutum	Horned lizard	5
Sceloporus undulatus	Pine or fence lizard	15
Anguidae:		
Ophisaurus ventralis	Glass snake or legless lizard	3
Agamidae:		
Uromastix acanthinurus	North African spiny-tailed lizard	1
Helodermatidae:		
Heloderma horridum	Mexican beaded lizard	2
Heloderma suspectum	Gila monster	5
Teiidae:		
Cnemidophorus sexlineatus	Six-lined race runner	1
Scincidae:		
Eumeces fasciatus	Blue-tailed skink	2
Tiliqua scincoides	Blue-tongued lizard	2
Varanidae:		
Varanus komodoensis	Komodo dragon	1
Varanus monitor	Indian monitor	1
Varanus niloticus	Nile monitor	2
Varanus salvator	Sumatran monitor	3
Zonuridae:		
Zonurus giganteus	African spiny lizard	6

SERPENTES

Boidae:		
Calabaria reinhardtii	Burrowing python	1
Constrictor constrictor	Boa constrictor	1
Constrictor imperator	Central American boa	7
Epicrates cenchris	Rainbow boa	30
Epicrates crassus	Salamanta	1
Epicrates striatus	Haitian boa	1
Eunectes murinus	Anaconda	1
Python molurus	Indian rock python	1
Python regius	Ball python	1
Tropidophis melanurus	Cuban boa	1
Colubridae:		
Coluber constrictor	Black snake	2
Coluber flagellum	Coachwhip	1
Diadophis punctatus	Ring-necked snake	1
Dinodon semicarinatum	Akamatah	2
Drymarchon corais couperi	Indigo snake	3
Elaphe guttata	Corn snake	4
Elaphe obsoleta	Pilot snake	3
Heterodon contortrix	Hog-nosed snake	5
Lampropeltis getulus	Chain king snake	1
Natrix sp	Water snake	15

REPTILES—continued

SERPENTES—continued

Scientific name	*Common name*	*Number*
Colubridae—Continued		
Natrix sp.	Indian water snake	1
Natrix piscator	Water snake	1
Oxybelis fulgidus	Green tree snake	1
Pituophis melanoleucus	Bull snake	2
Storeria dekayi	De Kay's snake	5
Thamnophis ordinoides	Western garter snake	2
Thamnophis sirtalis	Garter snake	10
Thrasops jacksoni	Black tree snake	1
Elapidae:		
Naja melanoleuca	West African cobra	3
Naja naja	Indian cobra	5
Crotalidae:		
Agkistrodon mokeson	Copperhead snake	3
Crotalus terrificus	South American rattlesnake	1
Trimeresurus flavoviridis	Habu	6
Viperidae:		
Vipera russellii	Russell's viper	1

TESTUDINATA

Chelydidae:		
Batrachemys nasuta	South American side-necked turtle	3
Hydraspis sp.	South American snake-necked turtle	3
Hydromedusa tectifera	South American long-necked turtle	16
Platemys platycephala	Flat-headed turtle	1
Platysternidae:		
Platysternum megacephalum	Large-headed Chinese turtle	1
Pelomedusidae:		
Pelomedusa galeata	Common African water tortoise	1
Podocnemis expansa	South American river tortoise	1
Kinosternidae:		
Kinosternon sp.	Central American musk turtle	1
Kinosternon subrubrum	Musk turtle	4
Chelydridae:		
Chelydra serpentina	Snapping turtle	8
Macrochelys temminckii	Alligator snapping turtle	1
Testudinidae:		
Chrysemys marginata	Western painted turtle	5
Chrysemys picta	Painted turtle	3
Clemmys guttata	Spotted turtle	6
Clemmys insculpta	Wood turtle	6
Cyclemys amboinensis	Kura kura box turtle	2
Geoclemys subtrijuga	Siamese field turtle	1
Geoemyda manni	Costa Rican terrapin	3

REPTILES—continued

TESTUDINATA—continued

Scientific name	*Common name*	*Number*
Testudinidae—Continued		
Graytemys barbouri	Barbour's turtle	6
Kinixys erosa	African hingeback turtle	3
Malaclemys centrata	Diamond-back turtle	24
Pseudemys concinna	Cooter	3
Pseudemys elegans	Cumberland terrapin	6
Pseudemys ornata	Central American water turtle	1
Pseudemys rugosa	Cuban terrapin	1
Terrapene sp.	Mexican box turtle	2
Terrapene carolina	Box turtle	50
Terrapene major	Florida box turtle	4
Testudo denticulata	South American land tortoise	2
Testudo ephippium	Duncan Island tortoise	1
Testudo hoodensis	Hood Island tortoise	3
Testudo tornieri	Soft-shelled land tortoise	1
Testudo vicina	Albemarle Island tortoise	6
Trionychidae:		
Amyda ferox	Soft-shelled turtle	6
Amyda triunguis	West African soft-shelled turtle	1

AMPHIBIA

CAUDATA

Salamandridae:		
Triturus pyrrhogaster	Red salamander	3
Triturus torosus	Giant newt	2
Triturus vulgaris	Common salamander	1
Amphiumidae:		
Amphiuma means	Blind eel or congo snake	1
Ambystomidae:		
Ambystoma maculatum	Spotted salamander	2
Ambystoma trigrinum	Axolotl	24

SALIENTIA

Dendrobatidae:		
Atelopus stelzneri	Black atelopus	30
Atelopus varius cruciger	Yellow atelopus	2
Dendrobates auratus	Arrow-poison frog	3
Bufonidae:		
Bufo americanus	Common toad	12
Bufo empusus	Sapo de concha	8
Bufo marinus	Marine toad	5
Bufo peltocephalus	Cuban giant toad	3
Ceratophrydae:		
Ceratophrys ornata	Horned frog	2
Hylidae:		
Acris gryllus	Cricket frog	3
Hyla crucifer	Tree frog	6

AMPHIBIA—continued

SALIENTIA—continued

Scientific name	*Common name*	*Number*
Pipidae:		
Pipa americana	Surinam toad	12
Xenopus laevis	African clawed frog	32
Ranidae:		
Rana catesbeiana	Bullfrog	4
Rana clamitans	Green frog	3
Rana occipitalis	West African bullfrog	1
Rana pipiens	Leopard frog	15
Rana sylvatica	Wood frog	4

FISHES

Aphyosemion australe	Lyre-tailed fish	1
Barbus everetti	Clown barb	8
Barbus sumatranus	----------	22
Carassius auratus	Goldfish	35
Channa asiatica	Snake head	1
Corydoras sp	Catfish	2
Danio malabaricus	Blue danio	7
Danio rerio	Zebra fish	8
Gymnocorymbus ternetzi	Black tetra	5
Hemigrammus sp	Tetra Buenos Aires	2
Hyphessorbrycon innesi	Neon tetra fish	2
Kryptopterus bicirrhis	Glass catfish	2
Lebistes reticulatus	Guppy	100
Lepidosiren paradoxa	South American lungfish	2
Limia vittata	Cuban limia	10
Macropodus sp	Paradise fish	14
Mesonauta insignis	----------	6
Mollienisia sphenops	Victory molly	20
Platypoecilus	Red moon	20
Platypoecilus maculatus	Goldplaties	12
Plecostomus sp	Armored catfish	1
Pristella riddlei	----------	1
Proptopterus annectens	African lungfish	2
Pterophyllum scalare	Angel fish	1
Serrasalmus ternetzi	Piranha or cannibal fish	1
Trichogaster leeri	Blue gourami	1
Xiphophorus helleri	Swordtail	1
	Tuxedo swordtail	8

ARACHNIDS

Latrodectus mactans	Black widow spider	1
Eurypelma sp	Tarantula	2
Centruroides gracilis	Mexican brown scorpion	1

INSECTS

Blabera sp	Giant cockroach	100

MOLLUSKS

Scientific name	*Common name*	*Number*
Achatina achatina	Giant land snail	2

SUMMARY

Animals on hand July 1, 1945	2,623
Accessions during the year	1,108
Total number of animals in collection during the year	3,731
Removals for various reasons such as death, exchanges, return of animals on deposit, etc	1,178
In collection on June 30, 1946	2,553

STATUS OF COLLECTION

Class	Species	Individuals	Class	Species	Individuals
Mammals	211	618	Insects	1	100
Birds	337	934	Mollusks	1	2
Reptiles	98	423	Arachnids	3	4
Amphibians	23	177			
Fish	27	295	Total	701	2,553

Respectfully submitted.

W. M. MANN, *Director.*

DR. A. WETMORE,
Secretary, Smithsonian Institution.

APPENDIX 8

REPORT ON THE ASTROPHYSICAL OBSERVATORY

SIR: I have the honor to submit the following report on the operations of the Astrophysical Observatory for the fiscal year ended June 30, 1946:

The Astrophysical Observatory comprises two divisions: (1) The Division of Astrophysical Research which is devoted to a study of solar radiation, and (2) the Division of Radiation and Organisms which investigates the effects of radiation upon organisms. The Observatory is supported largely by Congressional appropriation, amounting in this fiscal year to $51,039, and in part by private funds. The equipment and housing of both divisions have remained nearly unchanged during the year.

(1) DIVISION OF ASTROPHYSICAL RESEARCH

Work at Washington.—In addition to the usual routine of correcting, recomputing, and verifying the solar observations as received from the three field stations (Montezuma, Chile; Table Mountain, Calif.; and Tyrone, N. Mex.), a tabulation was made, after critical study, summarizing the solar record for the calendar year 1945. These values add another year to the great table of volume 6 of the Annals referred to in last year's report. Progress has also been made in the continued search for possible improvements in solar-constant instrumentation and methods. A new vacuum bolometer, designed by L. B. Clark, technologist of the Observatory, is in preparation. This new design will eliminate the gradual loss of sensitivity which we have noted in the past arising from certain impurities in the vacuum chamber.

Reference was made in last year's report to a contract, signed in June 1945, with the Office of the Quartermaster General, Army Service Forces, under the terms of which the Observatory is to make a detailed study of sun and sky radiation at Camp Lee, Va., as part of extensive tests in progress there to determine the causes for the deterioration of tents and tent fabrics. It is known that radiation from the sun and sky falling upon exposed fabrics over extended periods is a factor which hastens deterioration in the fabrics. Practically nothing is known, however, of the amount of radiation required, nor of the part

of the spectrum most active, in the degradation. The development of suitable instruments and methods for this radiation study at Camp Lee, the installation of the equipment, and the organization of the observing program occupied the time of most of the staff for several months. The type of instrument adopted is a special form of the sensitive, quick-acting thermoelement which Mr. Clark has developed and used in many lines of research. Eight copies of this instrument, all automatically recording, were prepared under Mr. Clark's direction, and are now in successful operation at Camp Lee. Special glass filters, hemispherical in shape, are used to restrict the instrument to the measurement of radiation in known parts of the spectrum. Description of these instruments is given in a report soon to be issued.

Dr. Abbot has continued his researches correlating solar activity with weather changes, and has published two articles on the subject during the year.

Publication of Dr. Arctowski's studies of terrestrial and solar atmospheric circulation has been delayed. Dr. Arctowski has uncovered certain interesting phases of the subject which he feels require further study.

Work in the field.—Notwithstanding the continued handicap of manpower shortage, observations were made on every available day at all three field stations until February 1946. At that time the Tyrone station was closed because of the resignation of S. C. Warner as director. Since the sky conditions at Tyrone have been progressively less favorable during the past 4 years, probably owing to increased smoke and dust from mining operations in the general vicinity, the closing of this station is not too greatly regretted. At the end of the fiscal year arrangements were nearly completed to install the Tyrone equipment temporarily at a wet, sea-level location in Florida where valuable observations can be made concerning the transmission of radiation through water vapor and related problems.

The program of observations of sun and sky radiation at Camp Lee, Va., begun in December 1945, is still in progress. The observations are made largely by personnel of the Quartermaster Board working under the direction of Mr. Hoover. This has necessitated frequent trips by Mr. Hoover to Camp Lee to install, supervise, and inspect the work. From these Camp Lee measurements, a great volume of information is accumulating concerning the kind and amount of radiation, for each hour of each day, that falls upon the tents and exposed panels. These data will be summarized and published at intervals. The first report is expected to appear shortly. It is confidently hoped that these measurements will help to explain the causes of exposed fabric deterioration.

In August 1945 Dr. Abbot spent several weeks at Mount Wilson, Calif., testing his new radiometer and developing plans for improved apparatus for measuring the energy spectra of stars.

(2) DIVISION OF RADIATION AND ORGANISMS

(Report prepared by Dr. Earl S. Johnston, Assistant Director of the Division)

Project 1. Photosynthesis.—For the accurate determination of carbon dioxide absorbed by green plants in the process of photosynthesis it is necessary to correct for the amount of carbon dioxide eliminated in respiration. Before many of the fundamental problems arising in this study can be solved it is absolutely necessary to improve the accuracy of the apparatus designed for the measurements of minute changes in the concentration of carbon dioxide surrounding the plant. During the past year much time has been given to this work and many experiments carried out. Respiration experiments have been run with barley seedlings, and small animals such as the cockroach, cricket, and grasshopper. A most interesting and unexplained respiration rhythm has been discovered in the cockroach. However, this phenomenon as well as an apparent water-vapor effect cannot be fully explained until more work is completed on this delicate and highly sensitive apparatus.

Project 2. Plant growth.—The study of plant growth under controlled artificial conditions of mineral nutrition, illumination, temperature, and humidity has been continued. The experiments carried out on wave-length balance indicated a need for improvement in the technique used. Further work along this line is being pursued.

Most of the work under this general project has centered around the problem of the role of the environment in the growth processes of cereal seedlings. The effects of radiation, which constitute the primary problem, have been found to depend upon other environmental factors, such as temperature, water supply, humidity, and chemical composition of substrate so that it has become necessary to evaluate the importance of these. Some of the observations and tentative conclusions from these as yet incomplete experiments are listed:

a. Development of seedling as a whole.—In the growth processes of grass seedlings a sharp distinction must be made between the rate of growth and the ultimate amount of growth. These two properties appear to be antagonistic in the sense that the slower the rate of development of a given organ, the longer does growth continue and the greater is the final size attained.

The rate of water absorption appears to be a determining factor in controlling the growth processes; the effects of certain other environ-

mental factors can be interpreted as resulting from an influence upon the water uptake.

b. Growth of coleoptile.—A marked effect of temperature upon the growth inhibition of the oats coleoptile by light has been observed. Below 25° C. the inhibition is independent of temperature; between 25° and 30° the inhibition effect becomes smaller as the temperature increases; above 30° there is no inhibition and possibly a slight stimulation by light. These statements apply, of course, only to the specific conditions of intensity and wave length which have been studied. An improved thermostat is being constructed so that the experiments can be extended with greater precision.

c. Root.—A very interesting effect of light upon root growth has been noted. Roots which are caused, by mechanical restraint, to grow in a horizontal direction elongate at their normal rate in darkness, but are greatly inhibited by light. In addition to the interest in the mechanism by which this result might be caused, it is noted that red light is effective, indicating the presence of a pigment which absorbs these wave lengths.

d. Cells.—Histological studies of the mesocotyl have been initiated in order to correlate the gross effects with the cellular development of this organ.

e. Technique.—In cultures of seedlings at high humidity and temperature a complication is introduced by the abundant development of molds. Considerable time has been devoted to devising techniques for inhibiting mold growth without influencing the development of the higher plants. As the result of tests with about 200 fungicidal chemicals a few have been found which appear promising. Sterilization by ultraviolet irradiation also has been found effective.

PERSONNEL

On March 9, 1946, the Observatory lost by death Lyman A. Fillmen, instrument maker for the past 15 years. His place was filled on April 8, 1946, by Darnel G. Talbert.

A. G. Froiland, on military furlough since July 8, 1943, returned as astrophysical aid November 16, 1945. In February 1946 he was promoted to associate astrophysicist and transferred to Montezuma, Chile, where he assumed charge of the Montezuma station, replacing F. A. Greeley. Mr. Greeley returned to Washington in May, and at the close of the fiscal year was enjoying a well-earned vacation. He and Mrs. Greeley had for 3 years carried on the arduous work of the Chilean station unaided.

In September 1945 A. F. Moore, director of the Tyrone station, exchanged stations with S. C. Warner, director of the Table Mountain

station. In January 1946 Mr. Warner resigned to return to the teaching profession.

PUBLICATIONS

During the fiscal year the following publications on the work of the Observatory appeared:

ABBOT, C. G., Correlations of solar variation with Washington weather. Smithsonian Misc. Coll., vol. 104, No. 13, July 1945.

ABBOT, C. G., 1945–1946 report on the 27.0074-day cycle in Washington precipitation. Smithsonian Misc. Coll., vol. 104, No. 21, March 1946.

ABBOT, C. G., Energy spectra of stars. Smithsonian Misc. Coll., vol. 104, No. 22, April 1946.

ABBOT, C. G., HOOVER, W. H., and CLARK, L. B., A sensitive radiometer. Smithsonian Misc. Coll., vol. 104, No. 14, August 1945.

ALDRICH, L. B., The solar constant and sunspot numbers. Smithsonian Misc. Coll., vol. 104, No. 12, July 1945.

Respectfully submitted.

L. B. ALDRICH, *Director.*

DR. A. WETMORE,
Secretary, Smithsonian Institution.

APPENDIX 9

REPORT ON THE LIBRARY

SIR: I have the honor to submit the following report on the activities of the Smithsonian library for the fiscal year ended June 30, 1946:

As the fiscal year 1945–1946 drew to a close, the library, as an organic part of the Smithsonian Institution, approached the hundredth anniversary of its founding on August 10, 1846, for service in "the increase and diffusion of knowledge among men."

To anyone to whom books are a perpetual source of exciting revelation of human experience and accomplishment, and of the working of men's minds, a backward glance at the hundred years of the library's history furnishes the outline for a richly colored picture of books in use in advancing the boundaries of knowledge. Section 8 of the Act of Organization provided for "the gradual formation of a library composed of valuable works pertaining to all departments of human knowledge," and although this universality of aim was later modified, of necessity, the continuity of purpose in procuring "a complete collection of the memoirs and transactions of learned societies throughout the world" has never been broken. The collection of this and similar important material, begun with the founding of the Institution and now forming part of the Smithsonian Deposit in the Library of Congress, has not been surpassed for size and completeness in the library world, while the working libraries built up at the Institution to serve immediately the Government bureaus it administers include many exceptionally rich collections of material on special subjects.

But even a hundred years ago, the acquisition of books alone was not the whole concern of the Institution in forming its library. Secretary Henry was keenly interested in making it "a center of bibliographical knowledge" as well, and the first librarian, Charles C. Jewett, a man in advance of his time, was a pioneer in proposing and devising the schemes for cooperative cataloging which, as later developed, have done so much to facilitate both the scholarly and the popular use of libraries. He early recognized what the late Lord Rayleigh put so well when, many years later, in an address before the British Association for the Advancement of Science, he said, "By a fiction as remarkable as any to be found in law, what has once been published * * * is usually spoken of as 'known' and it is often forgotten that

the rediscovery in the library may be a more difficult and uncertain process than the first discovery in the laboratory."

The importance of making this "rediscovery in the library" easy for serious students was never so urgently impressed upon librarians as during the late war, when libraries were overrun by research workers from the war agencies. Then as never before did both the excellencies and the deficiencies of library cataloging and of reference and bibliographical services come to light. Just how large a part books played in winning the war it is impossible to say, but many a tale could be told of the finding of a fact which, like the proverbial horseshoe nail in reverse, helped make victory possible. The Smithsonian library is gratified that it was so extensively used by the war agencies. It, in turn, received no small benefit from the experience gained in serving them, which is of especial value in making constructive plans for the improvement of its catalog and for the betterment of its service in general.

VJ-day, coming as it did early in the fiscal year, made the year's history one of conversion to the postwar activities of rehabilitation. Before the war was over, publications had already begun to come in from the liberated countries in Europe, and as the year advanced and shipping conditions improved, more and larger shipments of material that had accumulated abroad arrived. Through the International Exchange Service, 4,937 pieces were delivered to the library, in comparison with 540 received the previous year.

The accessions division recorded the receipt of 37,143 pieces altogether, an increase of more than 11,000 over the year before. In accordance with routine procedure, all documents, dissertations, and other publications not immediately pertinent to the work of the Institution were sent directly to the Library of Congress and there were 9,162 of these, while the total number of volumes and parts cataloged or entered for the Smithsonian Deposit was 5,016.

Among the 1,303 purchased books there were a number of out-of-print works which are noteworthy not so much for their rarity as because they filled some special gap in the collections. A few of them were: The Game-birds and Water-fowl of South Africa, by Boyd R. Horsbrugh, 1912; Etching, an Outline of its Technical Processes and its History . . ., by Sylvester R. Koehler, 1885; Miniatures des Cinq Siècles, 1920; A History of British Birds, by Francis O. Morris, 8 volumes, 1863–67; Icones Filicum Japoniae, by Masasuke Ogata, 7 volumes, 1928–36; A Voyage in the South Seas, in the Years 1812, 1813, and 1814, by Capt. David Porter, of the American Frigate, the *Essex*, 1823; Anders Zorn, Aquafortiste, by Axel L. Romdahl, 1923; Handbuch der Entomologie, by Christoph W. M. Schröder, 3 volumes, 1925–

29; A Brief History of Old English Porcelain and its Manufactories . . ., by Louis M. E. Solon, 1903; Travels of the Jesuits, into Various Parts of the World: particularly China and the East-Indies . . . Translated from the celebrated Lettres édifiantes & curieuses . . . To which is now prefixed, an Account of the Spanish Settlements, in America, with a general index to the whole work, by Mr. Lockman, 2d ed., 2 volumes, 1762; American Lace and Lace Makers, by Mrs. Emily Noyes Vanderpoel, edited by Elizabeth C. Barney Buel, 1924; Arcana Entomologica, by John Obadiah Westwood, 1845; A Voyage Round the World, in the Years MDCCXL, I, II, III, IV, by George Anson, esq; now Lord Anson, Commander in Chief of a Squadron of His Majesty's Ships, sent upon an Expedition to the South-Seas. Compiled from his Papers and Materials, by Richard Walter . . . 5th ed., 1749.

Gifts received were even more numerous than in the preceding year and numbered 4,103, exclusive of the Gilmore collection on vertebrate paleontology which arrived late in the year and has not yet been completely counted. Mrs. Gilmore's gift to the National Museum of the late Dr. Charles W. Gilmore's private library on the subject of his special studies is an important one. Its 600 volumes and especially its hundreds of reprints and separates are invaluable to the work of the division of vertebrate paleontology where it will be housed as a part of the division's sectional library.

To the many other donors of useful books and papers the library is most grateful. Coming as they do from friends of the Institution all over the world they often supply needs in the collections that it would be otherwise difficult to fill.

Toward the close of the fiscal year the Institution was so fortunate as to receive by transfer from the National Academy of Sciences about 850 parts of valuable old scientific serial publications needed for the completion of sets in the Astrophysical Observatory and the Museum libraries and to fill other lacunae in the collections.

With the reestablishment of interrupted exchange relationships all over the world came also the opportunity to share in the rehabilitation of destroyed libraries. Several thousand pieces were withdrawn for this purpose from the library's very large collection of duplicate serial parts, some 1,800 of them in response to specific requests from individual libraries for certain titles, but most of them to be used in combination with similar materials from other libraries collected and to be distributed by the American Book Center for War Devastated Libraries. It would be possible to do more of this very gratifying but time-consuming work, as well as other much-needed work with the duplicates, if the library staff were large enough so that a competent

member, with suitable assistance, could be put in full-time charge of the collections. The duplicates have never been fully organized nor thoroughly studied. They include much material that would be valuable in arranging special exchanges with other libraries for comparable material. Since the termination of the WPA project under which an excellent beginning of their proper sorting and filing was made, it has not been possible to continue any systematic work on them, and the large annual additions that are made to the collections are almost wholly unarranged.

The cataloging of purchased publications and of most of the other currently received material was well kept up, but there was little opportunity to make additions to the union catalog of records of the older publications belonging to the bureau libraries, and none to make progress in reducing the huge "backlog" of incompletely or inaccurately cataloged books. The inadequacy and incompleteness of the catalogs in leading quickly to the information in the older material in the library was distressingly obvious during the war. The cataloging problem is a serious one, and the only satisfactory solution of it would seem to be to make it a special project organized and planned to be completed by a staff especially engaged to do it within a given period of time.

Changes in the library's personnel were the resignation of Mrs. Margaret L. O'Keef on November 2, 1945, and the appointment of Miss Lillian Treder to succeed her on June 17, 1946.

The most urgent of the library's needs continues to be more and better-arranged shelf room. The present overcrowding is extremely serious everywhere, and in the Natural History Building, current accessions can only be shelved by removing older publications and sending them to the inconveniently located and scattered bits of shelf space available in the attic stacks of the Arts and Industries Building. Both the books and the library service suffer badly from such an arrangement. The questions of the library's housing throughout the Institution, and of its cataloging, taken together, have grown to constitute what amounts to a reorganizational problem. The opening year of the Institution's second century would seem to be a most suitable time to look for its solution.

SUMMARIZED STATISTICS

Accessions

	Volumes	Total recorded volumes June 30, 1946
Astrophysical Observatory (including Radiation and Organisms)	205	11,920
Bureau of American Ethnology	109	34,314
Freer Gallery of Art	215	21,697
National Collection of Fine Arts	414	10,569
National Museum	2,772	236,316
National Zoological Park	21	4,142
Smithsonian Deposit at the Library of Congress	1,257	577,430
Smithsonian office	285	31,965
Total	5,278	928,353

Neither incomplete volumes of periodicals nor separates and reprints from periodicals are included in these figures.

Exchanges

New exchanges arranged 262

91 of these were assigned to the Smithsonian Deposit.

Specially requested publications received 6,259

891 of these were obtained to fill gaps in the Smithsonian Deposit sets.

Cataloging

Volumes and pamphlets cataloged 6,124

Cards added to catalogs and shelf lists 25,326

Periodicals

Periodical parts entered 12,947

Of these 3,399 were sent to the Smithsonian Deposit.

Circulation

Loans of books and periodicals 10,223

This figure does not include the very considerable intramural circulation of books and periodicals assigned to sectional libraries for filing, of which no count is kept.

Binding

Volumes sent to the bindery 840

Volumes repaired in the Museum 1,010

Respectfully submitted.

LEILA F. CLARK, *Librarian.*

Dr. ALEXANDER WETMORE,
Secretary, Smithsonian Institution.

APPENDIX 10

REPORT ON PUBLICATIONS

SIR: I have the honor to submit the following report on the publications of the Smithsonian Institution and the Government branches under its administrative charge during the year ended June 30, 1946.

The Institution published during the year 16 papers in the Smithsonian Miscellaneous Collections, 1 Annual Report of the Board of Regents and pamphlet copies of 23 articles in the Report appendix, 1 Annual Report of the Secretary, 2 special publications, and a reprint of 1 special publication.

The United States National Museum issued two Annual Reports, 6 Bulletins, and 5 Proceedings papers.

The Bureau of American Ethnology issued 1 Annual Report, 1 Bulletin, 2 volumes of a five-volume Bulletin, and 1 publication of the Institute of Social Anthropology.

The National Collection of Fine Arts issued one catalog.

The Freer Gallery of Art issued one pamphlet.

Of the publications there were distributed 129,750 copies, which included 148 volumes and separates of Smithsonian Contributions to Knowledge, 29,257 volumes and separates of Smithsonian Miscellaneous Collections, 24,675 volumes and separates of Smithsonian Annual Reports, 18,990 War Background Studies, 2,356 Smithsonian special publications, 45 reports on the Harriman Alaska Expedition, 32,887 volumes and separates of National Museum publications, 12,730 publications of the Bureau of American Ethnology, 1,628 publications of the Institute of Social Anthropology, 10 catalogs of the National Collection of Fine Arts, 5 pamphlets of the Freer Gallery of Art, 16 Annals of the Astrophysical Observatory, 1,056 reports of the American Historical Association, and 5,947 miscellaneous publications not printed by the Smithsonian Institution (mostly Survival Manuals).

SMITHSONIAN MISCELLANEOUS COLLECTIONS

Sixteen papers in this series were issued, as follows:

VOLUME 104

No. 11. The West Atlantic boring mollusks of the genus *Martesia*, by Paul Bartsch and Harald A. Rehder. 16 pp., 3 pls. (Publ. 3804.) July 2, 1945.

No. 12. The solar constant and sunspot numbers, by L. B. Aldrich. 5 pp., 1 fig. (Publ. 3806.) July 2, 1945.

No. 13. Correlations of solar variation with Washington weather, by C. G. Abbot. 10 pp., 5 figs. (Publ. 3807.) July 28, 1945.

No. 14. A sensitive radiometer, by C. G. Abbot, W. H. Hoover, and L. B. Clark. 6 pp., 1 fig. (Publ. 3808.) Aug. 23, 1945.

No. 15. A bibliography and short biographical sketch of William Healey Dall, by Paul Bartsch, Harald Rehder, and Beulah E. Shields. 96 pp., 1 pl. (Publ. 3810.) January 30, 1946.

No. 16. An important new species of oyster from North Borneo suitable for introduction in the Philippines, by Paul Bartsch. 2 pp., 2 pls. (Publ. 3812.) December 12, 1945.

No. 17. New Westville, Preble County, Ohio, meteorite, by E. P. Henderson and S. H. Perry. 9 pp., 4 pls., 1 fig. (Publ. 3814.) January 30, 1946.

No. 18. The skeletal anatomy of fleas (Siphonaptera), by R. E. Snodgrass. 89 pp., 21 pls. (Publ. 3815.) April 1, 1946.

No. 19. Sunspot changes and weather changes, by H. H. Clayton. 29 pp., 23 figs. (Publ. 3816.) March 6, 1946.

No. 20. Schistosomophora in China, with descriptions of two new species and a note on their Philippine relative, by Paul Bartsch. 7 pp., 1 pl. (Publ. 3841.) April 10, 1946.

No. 21. 1945-1946 report on the 27.0074-day cycle in Washington precipitation, by C. G. Abbot. 2 pp. (Publ. 3842.) March 27, 1946.

No. 22. Energy spectra of stars, by C. G. Abbot. 5 pp., 2 figs. (Publ. 3843.) April 10, 1946.

VOLUME 106

No. 3. A list of fresh-water fishes from San José Island, Pearl Islands, Panamá, by Samuel F. Hildebrand. 3 pp. (Publ. 3847.) June 10, 1946.

No. 4. Notes on the herpetology of the Pearl Islands, Panamá, by Doris M. Cochran. 8 pp. (Publ. 3848.) June 24, 1946.

No. 11. Review of the New World species of *Hippodamia* Dejean (Coleoptera: Coccinellidae), by Edward A. Chapin. 39 pp., 22 pls. (Publ. 3856.) June 14, 1946.

No. 12. Descriptions of two new leafbirds from Siam, by H. G. Deignan. 3 pp. (Publ. 3856.) June 24, 1946.

SMITHSONIAN ANNUAL REPORT

Report for 1944.—The complete volume of the Annual Report of the Board of Regents for 1944 was received from the Public Printer December 12, 1945:

Annual Report of the Board of Regents of the Smithsonian Institution showing the operations, expenditures, and condition of the Institution for the year ended June 30, 1944. ix+503 pp., 40 pls., 69 figs. (Publ. 3776.)

The general appendix contained the following papers (Publs. 3777–3799):

Solar variation and weather, by Charles G. Abbot.
Astronomy in a world at war, by A. Vibert Douglas.
The structure of the universe, by Claude William Heaps.
Industrial science looks ahead, by David Sarnoff.
The new microscopes, by R. E. Seidel and M. Elizabeth Winter.
Radio acoustic ranging (R. A. R.), by Commander K. T. Adams.

The David W. Taylor Model Basin, by Rear Admiral Herbert S. Howard.
Research for aeronautics—its planning and application, by W. F. Farren.
Human limits in flight, by Bryan H. C. Matthews.
Trans-Arctic aviation, by Lt. Elmer Plischke.
Our petroleum resources, by Wallace E. Pratt.
Woods and trees: Philosophical implications of some facts of science, by Frederick H. Krecker.
Biology and medicine, by Asa Crawford Chandler.
The locust plague, by B. P. Uvarov.
The codling moth, by B. A. Porter.
Grassland and farmland as factors in the cyclical development of Eurasian history, by J. Russell Smith.
Southern Arabia, a problem for the future, by Carleton S. Coon.
The New World Paleo-Indian, by Frank H. H. Roberts, Jr.
Easter Island, by Alfred Métraux.
Brain rhythms, by E. D. Adrian.
The development of penicillin in medicine, by H. W. Florey and E. Chain.
Recent advances in anesthesia, by John C. Krantz, Jr.
Aspects of the epidemiology of tuberculosis, by Leland W. Parr.

Report for 1945.—The Report of the Secretary, which included the financial report of the executive committee of the Board of Regents, and which will form part of the Annual Report of the Board of Regents to Congress, was issued January 4, 1946.

Report of the Secretary of the Smithsonian Institution and financial report of the executive committee of the Board of Regents for the year ended June 30, 1945. ix+116 pp., 2 pls. (Publ. 3813.) 1946.

The Report volume for 1945, containing the general appendix, was in press at the close of the year.

SPECIAL PUBLICATIONS

The Smithsonian Institution. 25 pp., 13 pls. (Publ. 3811.) January 14, 1946.
National Aircraft Collection, by Paul Edward Garber. Sixth Edition. 43 pp., illus. (Publ. 3840.) May 31, 1946.

The following special publication was reprinted:

Brief Guide to the Smithsonian Institution. Sixth Edition. 80 pp., illus. 1946.

PUBLICATIONS OF THE UNITED STATES NATIONAL MUSEUM

The editorial work of the National Museum has continued during the year under the immediate direction of the editor, Paul H. Oehser. There were issued 2 Annual Reports, 5 Proceedings papers, and 6 Bulletins.

REPORTS

Report on the progress and condition of the United States National Museum for the year ended June 30, 1944. iii+100 pp. January 5, 1946.
Report on the progress and condition of the United States National Museum for the year ended June 30, 1945. iii+112 pp. June 28, 1946.

PROCEEDINGS: VOLUME 96

No. 3195. *Hyporhamphus patris*, a new species of hemiramphid fish from Sinaloa, Mexico, with an analysis of the generic characters of *Hyporhamphus* and *Hemiramphus*, by Robert R. Miller. Pp. 185-193, fig. 9, pl. 11. July 27, 1945.

No. 3196. Notes on recently mounted reptile fossil skeletons in the United States National Museum, by Charles W. Gilmore. Pp. 195–203, pls. 12–19. February 5, 1946.

No. 3197. The onychophores of Panama and the Canal Zone, by Austin H. Clark and James Zetek. Pp. 205–213. February 21, 1946.

No. 3198. Echiuroid worms of the North Pacific Ocean, by Walter Kenrick Fisher. Pp. 215–292, figs. 10–19, pls. 20–37. April 11, 1946.

No. 3199. The osteology of the fossil turtle *Testudo praeextans* Lambe, with notes on other species of *Testudo* from the Oligocene of Wyoming, by Charles W. Gilmore. Pp. 293–310, figs. 20–27, pls. 38–44. March 28, 1946.

BULLETINS

No. 185, part 4. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America, compiled by Richard E. Blackwelder. Pp. 551–763. May 13, 1946.

No. 186. The birds of northern Thailand, by H. G. Deignan. v+616 pp., 4 maps, 9 pls. September 17, 1945.

No. 187. An annotated checklist and key to the snakes of Mexico, by Hobart M. Smith and Edward M. Taylor. iv+239 pp. October 5, 1945.

No. 188. The fresh-water fishes of Siam, or Thailand, by Hugh M. Smith. xi+622 pp., 107 figs., 9 pls. November 13, 1945.

No. 189. A descriptive catalog of the shore fishes of Peru, by Samuel F. Hildebrand. xi+530 pp., 95 figs. February 26, 1946.

No. 190. The North American clear-wing moths of the family Aegeriidae, by George P. Engelhardt. vi+221 pp., 32 pls. (16 in color). June 28, 1946.

PUBLICATIONS OF THE BUREAU OF AMERICAN ETHNOLOGY

The editorial work of the Bureau has continued under the immediate direction of the editor, M. Helen Palmer. During the year the following publications were issued:

Sixty-second Annual Report of the Bureau of American Ethnology, 1944–1945. 9 pp.

Bulletin 137. The Indians of the Southeastern United States, by John R. Swanton. 943 pp., 108 pls., 5 figs., 13 maps.

Bulletin 143. Handbook of South American Indians. Julian H. Steward, editor. Volume 1: The Marginal tribes. 624 pp., 112 pls., 69 figs., 7 maps. Volume 2: The Andean civilizations. 1,035 pp., 192 pls., 100 figs., 11 maps.

Institute of Social Anthropology Publ. No. 2. Cherán: A Sierra Tarascan village, by Ralph L. Beals. 225 pp., 8 pls., 19 figs., 5 maps.

NATIONAL COLLECTION OF FINE ARTS

The National Collection of Fine Arts issued one catalog, as follows:

Catalog of American and European paintings in the Gellatly Collection. Third Edition. 20 pp., 11 pls. 1945.

FREER GALLERY OF ART

The Freer Gallery of Art issued one pamphlet, as follows:

The Freer Gallery of Art. Revised Edition. 12 pp., 6 pls., 2 figs. 1945.

REPORT OF THE AMERICAN HISTORICAL ASSOCIATION

The annual reports of the American Historical Association are transmitted by the Association to the Secretary of the Smithsonian Institution and are communicated by him to Congress, as provided by the act of incorporation of the Association. The following report volumes were issued this year:

Annual Report of the American Historical Association for 1944. Vol. 1, Proceedings and Guide to the American Historical Review, 1895–1945; vol. 2, Calendar of the American Fur Company's Papers. Part 1: 1831–1840; vol. 3, Calendar of the American Fur Company's Papers. Part 2: 1841–1849.

The following were in press at the close of the fiscal year: Annual Report for 1943, vol. 2 (Writings on American History); Annual Report for 1945, vol. 1 (Proceedings and list of members); vols. 2, 3, and 4 (Spain in the Mississippi Valley, 1765–1794, Parts 1, 2, and 3).

REPORT OF THE NATIONAL SOCIETY, DAUGHTERS OF THE AMERICAN REVOLUTION

The manuscript of the Forty-eighth Annual Report of the National Society, Daughters of the American Revolution, was transmitted to Congress, in accordance with law, November 7, 1945.

ALLOTMENTS FOR PRINTING

The congressional allotments for the printing of the Smithsonian Annual Reports to Congress and the various publications of the Government bureaus under the administration of the Institution were virtually used up at the close of the year. The appropriation for the coming year, ending June 30, 1947, totals $88,500, allotted as follows:

Smithsonian Institution	$16,000
National Museum	43,000
Bureau of American Ethnology	17,480
National Collection of Fine Arts	500
International Exchanges	200
National Zoological Park	200
Astrophysical Observatory	500
American Historical Association	10,620
Total	88,500

Respectfully submitted.

W. P. True, *Chief, Editorial Division.*

Dr. A. Wetmore,
Secretary, Smithsonian Institution.

REPORT OF THE EXECUTIVE COMMITTEE OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION

FOR THE YEAR ENDED JUNE 30, 1946

To the Board of Regents of the Smithsonian Institution:

Your executive committee respectfully submits the following report in relation to the funds of the Smithsonian Institution, together with a statement of the appropriations by Congress for the Government bureaus in the administrative charge of the Institution.

SMITHSONIAN ENDOWMENT FUND

The original bequest of James Smithson was £104,960 8s. 6d.—$508,318.46. Refunds of money expended in prosecution of the claim, freights, insurance, etc., together with payment into the fund of the sum of £5,015, which had been withheld during the lifetime of Madame de la Batut, brought the fund to the amount of $550,000.

Since the original bequest, the Institution has received gifts from various sources, the income from which may be used for the general work of the Institution. These, including the original bequest, plus savings, are listed below, together with the income for the present year.

ENDOWMENT FUNDS

(Income for unrestricted use of the Institution)

Partly deposited in United States Treasury at 6 percent and partly invested in stocks, bonds, etc.

	Investment	Income present year
Parent fund (original Smithson bequest, plus accumulated savings)	$728,878.29	$43,701.53
Subsequent bequests, gifts, etc., partly deposited in the United States Treasury and partly invested in the Consolidated Fund:		
Avery, Robert S. and Lydia, bequest fund	51,770.56	2,155.51
Endowment, from gifts	315,455.63	10,989.98
Habel, Dr. S., bequest fund	500.00	30.00
Hachenberg, George P. and Caroline, bequest fund	4,079.43	142.08
Hamilton, James, bequest fund	2,909.47	164.26
Henry, Caroline, bequest fund	1,226.77	42.73
Hodgkins, Thomas G. (general) gift	146,412.95	8,019.25
Rhees, William Jones, bequest fund	1,069.87	52.11
Sanford, George H., memorial fund	2,002.96	97.45
Witherspoon, Thomas A., memorial fund	130,900.34	4,559.12
Special fund, stock in reorganized closed banks	2,280.00	527.69
Total	658,607.98	26,780.18
Grand total	1,387,486.27	70,481.71

The Institution holds also a number of endowment gifts, the income of each being restricted to specific use. These, plus accretions to date, are listed below, together with income for the present year.

	Investment	Income, present year
Abbott, William L., fund for investigations in biology	$107,456.55	$3,486.59
Arthur, James, fund for investigations and study of the sun and lecture on same	40,566.73	1,412.90
Bacon, Virginia Purdy, fund, for traveling scholarship to investigate fauna of countries other than the United States	50,819.13	1,769.97
Baird, Lucy H., fund for creating a memorial to Secretary Baird	24,422.02	850.59
Barstow, Frederick D., fund, for purchase of animals for Zoological Park	1,014.10	35.32
Canfield Collection fund for increase and care of the Canfield collection of minerals	38,795.43	1,351.20
Casey, Thomas L., fund, for maintenance of the Casey collection, and promotion of researches relating to Coleoptera	9,303.64	324.04
Chamberlain, Francis Lea, fund, for increase and promotion of Isaac Lea collection of gems and mollusks	28,564.24	994.86
Eickemeyer, Florence Brevoort, fund, for preservation and exhibition of the photographic collection of Rudolph Eickemeyer, Jr	514.58	17.92
Hillyer, Virgil, fund, for increase and care of Virgil Hillyer collection of lighting objects	6,666.45	232.19
Hitchcock, Dr. Albert S., library fund, for care of Hitchcock Agrostological Library	1,600.54	55.74
Hodgkins fund, specific, for increase and diffusion of more exact knowledge in regard to nature and properties of atmospheric air	100,000.00	6,000.00
Hrdlička, Aleš and Marie, fund, to further researches in physical anthropology and publication in connection therewith	18,654.65	649.72
Hughes, Bruce, fund, to found Hughes alcove	19,415.74	676.23
Long, Annette and Edith C., fund, for upkeep and preservation of Long collection of embroideries, laces, etc	550.78	19.18
Myer, Catherine Walden, fund, for purchase of first-class works of art for the use and benefit of the National Collection of Fine Arts	19,227.51	669.67
National Collection of Fine Arts, Julia D. Strong bequest fund, for benefit of National Collection of Fine Arts	10,141.81	353.21
Pell, Cornelia Livingston, fund, for maintenance of Alfred Duane Pell collection	7,518.73	261.87
Poore, Lucy T. and George W., fund, for general use of the Institution when principal amounts to $250,000	102,126.64	4,228.27
Rathbun, Richard, memorial fund, for use of division of U. S. National Museum containing Crustacea	10,788.45	375.73
Reid, Addison T., fund, for founding chair in biology in memory of Asher Tunis	30,261.17	1,399.12
Roebling Collection fund, for care, improvement and increase of Roebling collection of minerals	122,418.63	4,263.71
Rollins, Miriam and William, fund, for investigations in physics and chemistry	95,247.10	3,319.23
Smithsonian employees retirement fund	80,371.03	2,799.24
Springer, Frank, fund, for care, etc. of Springer collection and library	18,189.94	633.54
Walcott, Charles D. and Mary Vaux, research fund, for development of geological and paleontological studies and publishing results thereof	430,925.04	14,746.52
Younger, Helen Walcott, fund, held in trust	50,125.70	2,513.81
Zerbee, Frances Brinckle, fund, for endowment of aquaria	962.14	33.51
Total	1,426,648.47	53,473.88

The above funds amount to a total of $2,814,134.74 and are carried in the following investment accounts of the Institution:

United States Treasury deposit account, drawing 6 percent interest	$1,000,000.00
Consolidated investment fund (income in table below)	1,551,671.40
Real estate, mortgages, etc	203,010.79
Special funds, miscellaneous investments	51,908.70
Uninvested capital	7,543.85
Total	2,814,134.74

CONSOLIDATED FUND

This fund contains substantially all the investments of the Institution, with the exception of those of the Freer Gallery of Art; the deposit of $1,000,000 in the United States Treasury, with guaranteed income of 6 percent; and investments in real estate and real-estate mortgages. This fund contains endowments for both unrestricted and specific use. A statement of principal and income of this fund for the last 10 years follows:

Fiscal year	Principal	Income	Percentage	Fiscal year	Principal	Income	Percentage
1937	$738,858.54	$33,819.43	4.57	1942	$1,270,968.45	$46,701.98	3.67
1938	867,528.50	34,679.64	4.00	1943	1,316,533.49	50,524.22	3.83
1939	902,801.27	30,710.53	3.40	1944	1,372,516.41	50,783.79	3.69
1940	1,081,249.25	38,673.29	3.47	1945	1,454,957.73	50,046.67	3.50
1941	1,093,301.51	41,167.38	3.76	1946	1,559,215.25	57,612.38	3.69

CONSOLIDATED FUND

Gain in investments over year 1945

Investments made from gifts and savings on income	$82,817.37
Investments of gain from sales, etc., of securities	21,440.15
Total	104,257.52

FREER GALLERY OF ART FUND

Early in 1906, by deed of gift, Charles L. Freer, of Detroit, gave to the Institution his collection of Chinese and other Oriental objects of art, as well as paintings, etchings, and other works of art by Whistler, Thayer, Dewing, and other artists. Later he also gave funds for the construction of a building to house the collection, and finally in his will, probated November 6, 1919, he provided stock and securities to the estimated value of $1,958,591.42, as an endowment fund for the operation of the Gallery.

The above fund of Mr. Freer was almost entirely represented by 20,465 shares of stock in Parke, Davis & Co. As this stock advanced in value, much of it was sold and the proceeds reinvested so that the fund now amounts to $5,994,394.31 in a selected list of securities classified later.

The invested funds of the Freer bequest are under the following headings:

Court and grounds fund	$671,519.80
Court and grounds maintenance fund	168,643.43
Curator fund	683,381.72
Residuary legacy fund	4,470,849.36
Total	5,994,394.31

Statement of principal and income for the last 10 years

Fiscal year	Principal	Income	Percentage
1937	$4,881,986.96	$280,969.53	5.75
1938	4,820,777.31	255,651.61	5.30
1939	5,075,976.76	212,751.78	4.19
1940	6,112,953.46	242,573.92	3.96
1941	6,030,586.91	233,079.22	3.86
1942	5,912,878.64	241,557.77	4.08
1943	5,836,772.01	216,125.07	3.70
1944	5,881,402.17	212,395.27	3.61
1945	5,864,061.73	212,552.69	3.62
1946	5,994,394.31	220,818.86	3.68

FREER FUND

Gain during present year from sale, call of securities, etc.	$130,332.58

SUMMARY OF ENDOWMENTS

Invested endowment for general purposes	$1,387,486.27
Invested endowment for specific purposes other than Freer endowment	1,426,648.47
Total invested endowment other than Freer endowment	2,814,134.74
Freer invested endowment for specific purposes	5,994,394.31
Total invested endowment for all purposes	8,808,529.05

CLASSIFICATION OF INVESTMENTS

Deposited in the U. S. Treasury at 6 percent per annum, as authorized in the United States Revised Statutes, sec. 5591		$1,000,000.00
Investments other than Freer endowment (cost or market value at date acquired):		
Bonds (18 different groups)	$627,612.34	
Stocks (51 different groups)	975,967.76	
Real estate and first-mortgage notes	203,010.79	
Uninvested capital	7,543.85	
		1,814,134.74
Total investments other than Freer endowment		2,814,134.74
Investment of Freer endowment (cost or market value at date acquired):		
Bonds (29 different groups)	2,962,710.30	
Stocks (53 different groups)	2,983,576.38	
Real estate first-mortgage notes	2,500.00	
Uninvested capital	45,607.63	
		5,994,394.31
Total investments		8,808,529.05

CASH BALANCES, RECEIPTS, AND DISBURSEMENTS DURING FISCAL YEAR 1946[1]

Cash balance on hand June 30, 1945		$760,218.09
Receipts:		
Cash income from various sources for general work of the Institution	$93,441.46	
Cash gifts and contributions expendable for special scientific objects (not for investment)	30,627.29	
Cash income from endowments for specific use other than Freer endowment and from miscellaneous scources (including refund of temporary advances)	192,425.47	
Cash capital from sale, call of securities, etc. (for investment)	350,519.70	
Total receipts other than Freer endowment		667,013.92
Cash income from Freer endowment	$220,818.86	
Cash capital from sale, call of securities, etc. (for investment)	1,599,813.00	
Total receipts from Freer endowment		1,820,631.86
Total		3,247,863.87
Disbursements:		
From funds for general work of the Institution:		
Buildings—care, repairs, and alterations	$3,108.43	
Furniture and fixtures	63.75	
General administration	27,109.04	
Library	2,989.55	
Publications (comprising preparation, printing and distribution)	14,995.12	
Researches and explorations	21,888.11	
		70,154.00
From funds for specific use other than Freer endowment:		
Investments made from gifts and from savings on income	82,817.37	
Other expenditures, consisting largely of research work, travel, increase and care of special collections, etc., from income of endowment funds, and from cash gifts for specific use (including temporary advances)	132,745.71	
Reinvestment of cash capital from sale, call of securities, etc	347,920.79	
Cost of handling securities, fee of investment counsel, and accrued interest on bonds purchased	3,303.45	
		566,787.32
From Freer endowment:		
Operating expenses of the Gallery, salaries, field expenses, etc	68,366.75	
Purchase of art objects	114,070.23	

[1] This statement does not include Government appropriations under the administrative charge of the Institution.

Disbursements—Continued		
From Freer endowment—Continued		
Reinvestment of cash capital from sale, call of securities, etc	$1,595,344.67	
Cost of handling securities, fee of investment counsel, and accrued interest on bonds purchased	25,730.45	
		$1,803,512.10
Cash balance June 30, 1946		807,410.45
Total		3,247,863.87

Included in the above receipts was cash received as royalties from sales of Smithsonian Scientific Series to the amount of $26,498.52. This was distributed as follows:

Smithsonian Institution Endowment Fund	$11,753.71
Smithsonian Institution Emergency Fund	2,938.42
Smithsonian Institution Unrestricted Fund, General	8,815.28
Salaries	2,991.11
	26,498.52

Included in the foregoing are expenditures for researches in pure science, publications, explorations, care, increase, and study of collections, etc., as follows:

Expended from general funds of the Institution:		
Publications	$14,995.12	
Researches and explorations	21,888.11	
		$36,883.23
Expenditures from funds devoted to specific purposes:		
Researches and explorations	40,495.84	
Care, increase, and study of special collections	5,586.81	
Publications	4,184.80	
		50,267.45
Total		87,150.68

The practice of depositing on time in local trust companies and banks such revenues as may be spared temporarily has been continued during the past year, and interest on these deposits has amounted to $739.72.

The Institution gratefully acknowledges gifts or bequests from the following:

Audrey H. Madden, for "Northern Mexico Archeological Fund," to further archeological investigations in Mexico.

National Academy of Sciences and Social Science Research Council, for "Committee for the Recovery of Archeological Remains."

Research Corporation, for printing "Smithsonian Elliptic Functions Tables," by G. W. Spenceley.

John A. Roebling, as a further contribution for research in radiation.

All payments are made by check, signed by the Secretary of the Institution on the Treasurer of the United States, and all revenues are deposited to the credit of the same account. In many instances deposits are placed in bank for convenience of collection and later are withdrawn and deposited in the United States Treasury.

The foregoing report relates only to the private funds of the Institution.

The following appropriations were made by Congress for the Government bureaus under the administrative charge of the Smithsonian Institution for the fiscal year 1946:

Salaries and expenses	$1,357,561.00
National Zoological Park	375,670.00

In addition, funds were transferred from other Departments of the Government for expenditure under direction of the Smithsonian Institution:

Cooperation with the American Republics (transfer from State Department)	$98,488.00
Working Fund, transferred from National Park Service, Interior Department, for archeological investigations in Missouri River Basin	20,000.00
Working Fund, transferred from Navy Department, for Crossroads Project	12,920.00

The report of the audit of the Smithsonian private funds is given below:

SEPTEMBER 26, 1946.

EXECUTIVE COMMITTEE, BOARD OF REGENTS,
Smithsonian Institution, Washington, D. C.

SIRS: Pursuant to agreement we have audited the accounts of the Smithsonian Institution for the fiscal year ended June 30, 1946, and certify the balances of cash on hand, including petty cash fund, June 30, 1946, to be $809,310.45.

We have verified the records of receipts and disbursements maintained by the Institution and the agreement of the book balances with the bank balances.

We have examined all the securities in the custody of the Institution and in the custody of the banks and found them to agree with the book records.

We have compared the stated income of such securities with the receipts of records and found them in agreement therewith.

We have examined all vouchers covering disbursements for account of the Institution during the fiscal year ended June 30, 1946, together with the authority therefor, and have compared them with the Institution's record of expenditures and found them to agree.

We have examined and verified the accounts of the Institution with each trust fund.

We found the books of account and records well and accurately kept and the securities conveniently filed and securely cared for.

All information requested by your auditors was promptly and courteously furnished.

We certify the balance sheet, in our opinion, correctly presents the financial condition of the Institution as at June 30, 1946.

WILLIAM L. YAEGER,
Certified Public Accountant.

Respectfully submitted.

FREDERIC A. DELANO,
VANNEVAR BUSH,
CLARENCE CANNON,
Executive Committee.

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01583 1068